



# Catalog

2008-2009

[www.clarku.edu/catalog](http://www.clarku.edu/catalog)

# Introduction



CLARK UNIVERSITY'S MISSION IS TO EDUCATE UNDERGRADUATE AND GRADUATE STUDENTS TO BE IMAGINATIVE AND CONTRIBUTING CITIZENS OF THE WORLD, AND TO ADVANCE THE FRONTIERS OF KNOWLEDGE AND UNDERSTANDING THROUGH RIGOROUS SCHOLARSHIP AND CREATIVE EFFORT. ♦ THE UNIVERSITY SEEKS TO PREPARE STUDENTS TO MEET THE CHALLENGES OF A COMPLEX AND RAPIDLY CHANGING SOCIETY. IN STUDENTS AND FACULTY, CLARK FOSTERS A COMMITMENT TO EXCELLENCE IN STUDYING TRADITIONAL ACADEMIC DISCIPLINES, AS WELL AS INNOVATION IN EXPLORING QUESTIONS THAT CROSS DISCIPLINARY BOUNDARIES. THE FREE PURSUIT OF INQUIRY AND THE FREE EXCHANGE OF IDEAS ARE CENTRAL TO THAT COMMITMENT. ♦ THE FOCUS OF CLARK'S ACADEMIC PROGRAM IS A LIBERAL-ARTS EDUCATION ENRICHED BY INTERACTIONS AMONG UNDERGRADUATE STUDENTS, GRADUATE STUDENTS, AND FACULTY, AND IS CLOSELY LINKED TO A SELECT NUMBER OF PROFESSIONAL PROGRAMS. CLARK ALSO SERVES STUDENTS WHO WISH TO CONTINUE FORMAL EDUCATION THROUGHOUT THEIR LIVES. ♦ THE INTELLECTUAL AND PERSONAL GROWTH OF STUDENTS IS ENHANCED BY A WIDE VARIETY OF EDUCATIONAL PROGRAMS AND EXTRACURRICULAR ACTIVITIES. CLARK BELIEVES THAT INTELLECTUAL GROWTH MUST BE ACCOMPANIED BY THE DEVELOPMENT OF VALUES, THE CULTIVATION OF RESPONSIBLE INDEPENDENCE, AND THE APPRECIATION OF A RANGE OF PERSPECTIVES. ♦ CLARK'S ACADEMIC COMMUNITY HAS LONG BEEN DISTINGUISHED BY THE PURSUIT OF SCIENTIFIC INQUIRY AND HUMANISTIC STUDIES, ENLIVENED BY A CONCERN FOR SIGNIFICANT SOCIAL ISSUES. AMONG MANY OTHER SCHOLARLY ENDEAVORS, CLARK CONTRIBUTES TO UNDERSTANDING HUMAN DEVELOPMENT, ASSESSING RELATIONSHIPS BETWEEN PEOPLE AND THE ENVIRONMENT, AND MANAGING RISK IN A TECHNOLOGICAL SOCIETY. ♦ CLARK IS DEDICATED TO BEING A DYNAMIC COMMUNITY OF LEARNERS ABLE TO THRIVE IN TODAY'S INCREASINGLY INTERRELATED SOCIETIES. THE UNIVERSITY MAINTAINS A NATIONAL AND INTERNATIONAL CHARACTER, ATTRACTING HIGH-CALIBER STUDENTS AND FACULTY FROM ALL QUARTERS OF THE GLOBE. AS A UNIVERSITY RESIDING IN AN URBAN CONTEXT, CLARK ALSO STRIVES TO ADDRESS THE NEEDS AND OPPORTUNITIES OF CONTEMPORARY URBAN LIFE.





## Academic Catalog 2008–2009

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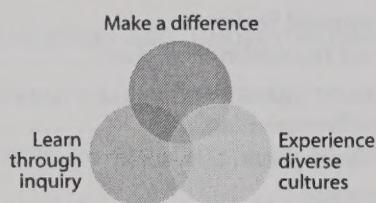
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# Hallmarks of a Clark Education



Clark's motto is "**Challenge Convention, Change our World.**" Clark is a place where students and faculty learn and teach in a vibrant intellectual environment that embodies three signatures: **Make a Difference**, **Learn through Inquiry** and **Experience Diverse Cultures**. The three signatures are distinct but mutually reinforcing elements of a unified whole, represented visually as three overlapping circles. The Clark experience and the Clark graduate embody all three



signatures.

**Make a Difference** describes Clark's mission as an institution that uses its intellectual capital to understand and address problems in the local and global communities of which it is a part. Because of Clark's status as a small research university, its urban location, and its long tradition of community partnerships, Clark is in an ideal position to make a difference in both local and global communities through the academic and extracurricular activities of its students, the scholarly activities of its faculty, and its partnerships with community organizations.

**Learn through Inquiry** describes Clark's commitment to hands-on learning and problem solving. The skills needed for problem solving in the discipline are developed sequentially, through a pervasive pedagogy of engagement. Throughout their Clark experience, students learn by actively working through real problems, issues and questions, mastering modes of inquiry, and acquiring the knowledge base required to ask and to answer important questions. Each student has an opportunity to participate in a culminating discipline-based experience in the context of senior seminars, research, or other capstone experiences.

**Experience Diverse Cultures** describes Clark's commitment to integrate the richness of many cultures into campus life and the student experience. Clark has melded its liberal arts focus and specific areas of research excellence to create educational programs with global reach, and has made a commitment to the value of diversity in the education of all students. Global opportunities and the intercultural character of the campus community provide a transformative experience for students.

# History



Clark University is a teaching and research institution founded in 1887, as the first all-graduate school in the United States. Until Clark instituted undergraduate programs in 1902, the university offered only Ph.D. granting programs. Clark is also one of the oldest universities to offer formal graduate programs, second only to Johns Hopkins University, and is one of only three New England universities, with Harvard and Yale, to be a founding member of the prestigious Association of American Universities.

Clark's first president was G. Stanley Hall, founder of the American Psychological Association, who earned the first Ph.D. in psychology in this country at Harvard.\* Clark has played a prominent role in the development of psychology as a distinguished discipline in the United States. Clark was the location for Sigmund Freud's famous "Clark Lectures" in 1909, introducing psychoanalysis to this country.

Clark also has played an important role in the development of geography as a discipline. Clark has granted more Ph.D.s in this environmentally related area than any other school in the nation. The George Perkins Marsh Institute was the first research center created to study the human dimensions of global environmental change.

Researchers who have held Clark appointments include A.A. Michelson, the first U.S. Nobel Prize winner in the sciences; and Robert Goddard, the father of the space age and the inventor of rocket technology. Other researchers at Clark created the formula for the windchill factor, defined chemical double bonding, developed research leading to the birth control pill, and made the first breakthrough in understanding how brain tissue regenerates itself.

**\* FUN FACT:** *You may wonder, if Clark and Johns Hopkins were the first schools in the United States to offer formalized graduate programs, how could Hall have earned a Ph.D. at Harvard?*

According to Mott Linn, Clark history buff and coordinator of archives and special collections at Goddard Library, although Clark and Johns Hopkins were the first in the U.S. to offer formalized graduate programs, it didn't mean that someone during that time could not earn a Ph.D. from a U.S. undergraduate institution like Harvard. It didn't happen very often, but when it did, the curriculum was planned specifically for the person seeking the degree. So although Hall earned a Ph.D. at Harvard, it was not through a formalized graduate program at a graduate school.



# Accreditation



Clark University is accredited by the New England Association of Schools and Colleges, Inc. through its Commission on Institutions of Higher Education.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer-review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future.

Institutional integrity is also addressed through accreditation.

Inquiries regarding the accreditation status by the New England Association should be directed to the administrative staff of the institution. Individuals may also contact:

Commission on Institutions of Higher Education  
New England Association of Schools and Colleges  
209 Burlington Road  
Bedford, MA 01730-1433  
(617) 271-0022  
E-mail: cihe@neasc.org

## The Undergraduate Academic Program



A Clark education is unique in that it provides a high-quality liberal arts education with personal attention and advanced study opportunities, as captured in the three Clark signatures. Most students begin their Clark career with a first-year seminar, designed to help them develop the skills and habits of mind they will need to succeed at Clark. Clark has developed a unique program of liberal studies that fosters critical thinking skills and broadens perspectives. Because they can choose among many different courses, students can take courses that interest them and, at the same time, satisfy their broad liberal arts requirements.

By the spring of sophomore year, students declare a major in which they develop depth and expertise. The University offers 31 majors, 30 minors and ten interdisciplinary concentrations, which can be combined to match individual interests and academic goals. Once students choose a major, their academic department becomes their intellectual "home," where they are able to work closely with faculty on research and other creative projects. As students acquire increasing depth and sophistication in a field of their choosing, they are able to take advantage of Clark's wide array of courses to construct an individualized program of study suited to their interests and career goals. In many fields, students have the opportunity to enter an honors program or accelerate to an advanced degree.

### First-Year Seminars

First-year seminars allow students to explore, in depth, various issues and subjects. First-year seminars focus on helping students develop core academic skills that will enhance success in later Clark courses: reading, writing, speaking, thinking, and debating, all at the college level of intellectual sophistication. Seminars are intensive, stimulating, and challenging, and are limited to 16 students each. The professor who teaches each first-year seminar also serves as academic advisor to the students in the seminar until they declare a major. Thus, students who enroll in first-year seminars start their Clark careers by developing a close relationship with both a professor and a small group of students who share at least one intellectual interest. All first-year seminars fill a Program of Liberal Studies (PLS) requirement.

First-year seminars change from year to year. As an example, we expect to offer the following seminars in Fall 2008:

- ARTH158** Art and the City of Worcester
- BIOL100** Introductory Biology/First-Year Research Seminar In Fungal Molecular Ecology
- CHEM042** Science in Science Fiction
- CHEM103** Accelerated Introductory Chemistry/Lecture, Laboratory
- CLAS050/HIST050** Jesus, History and the Apocalypse
- CMLT129** Revolution in Hispanic Culture
- COMM050** Communication & Culture in Main South
- CSCI100** Think Like Computers
- CSCI110** Diving Into Research
- ECON100** Economics of Environmental Regulation
- ENG104** To The Woods: Walden Today
- ENG118** Webs and Labyrinths: Imagining Globalization in Art and Literature
- ENG122** Terror of the Gothic
- ENG131** Border Crossings: Narratives of Travel, Exile, and Immigration
- ENG147** Mythology
- FREN108** Paris and 20th Century Artistic Movements: Art, Theater, and Cinema
- GEOG090/GES090** Native Americans and Natural Resources
- GOVT095** Transnationalism: Individuals, Networks and Global Politics
- HIST039** At Home in 19th-Century America: Domesticity and American Culture
- HIST042** Nazi Germany
- IDCE011/MGMT011** Making a Difference
- MATH110** Diving Into Research: Rigidity and Geometry
- MGMT020** Strikes in America
- PHIL100** The Good Life
- PHIL104** The AIDS Pandemic
- PHIL109** David Hume and his Critics: Skepticism vs. Belief
- PSYC193** Discourse, Self and Feeling
- SOC085** The Corporate Planet
- SOC095** Why Marry?
- TA153** Modern Drama



## Program of Liberal Studies

The foundation of a Clark undergraduate education is the Program of Liberal Studies. Through this program, students acquire the intellectual habits, skills and perspectives that are essential for self-directed learning. They are given a framework within which they can select a program of study and receive a broad introduction to liberal and life-long learning. Students have the option of fulfilling the requirements of the Program of Liberal Studies through the International Studies Stream, a special program, which consists of courses that prepare them to better understand global, political, cultural and economic issues.

The Program of Liberal Studies has two components:

1. **Critical Thinking Courses:** While every course in the University involves work in critical thinking, two types of courses place special emphasis on the cultivation of these skills. Students take one course in each of these areas:
  - **Verbal Expression:** Verbal Expression courses place special emphasis on the relationship between writing and critical thinking within a particular discipline.
  - **Formal Analysis:** Formal Analysis courses include the use of a formal, symbolic language as appropriate for a specific discipline, rules of logic for that language, and the use of that language for modeling the subject matter of the discipline.
2. **Perspectives Courses:** Perspectives courses offer breadth and introduce students to the different ways in which various disciplines or fields define thinking, learning and knowing. Students must successfully complete one course in each of the following six perspectives categories, with each course taken in a different academic department:
  - **Aesthetic:** Aesthetic Perspective courses emphasize artistic expression and the perception, analysis and evaluation of aesthetic form. These courses are designed to enhance students' appreciation and understanding of the arts.
  - **Global Comparative:** Global Comparative Perspective courses introduce students to comparative analysis by exploring the cultural, political or economic aspects of human diversity around the world. They provide students with tools for analyzing human experience by examining similarities and differences in a global or international context.
  - **Historical:** Historical Perspective courses develop students' capacity to understand the contemporary world in the larger framework of tradition and history. Courses focus on the problems of interpreting the past and can also deal with the relationship between past and present. All courses are broad in scope and introduce students to the ways scholars think critically about the past, present and future.
  - **Language and Culture:** Language and Culture Perspective courses foster the study of language as an expression of culture. Students may study foreign languages, which highlight the relationship between language and culture, or English-language courses that deal with the same issue.
  - **Natural Scientific:** Scientific Perspective courses teach the principal methods and results of the study of the natural world. Courses focus on the knowledge and theoretical bases of science. They also include laboratories or similar components to introduce students to the observation of natural phenomena and the nature of scientific study.

- **Values:** Values Perspective courses examine the moral dimension of human life as reflected in personal behavior, institutional structures and public policy in local and global communities. Courses taught from the values perspective focus not only on the systematic formulation and analysis of moral and ethical claims, but also on how moral decisions affect both the individual and society.

## Departmental, Interdisciplinary and Student-Designed Majors

Sometime before the end of their sophomore year, students choose a major—the area in which they will pursue a course of study in depth. Students may choose a traditional discipline or an interdisciplinary major, or in some cases, may design a major tailored to their particular academic interests. While anchored in one area, the undergraduate major is structured to include courses in related disciplines. This ensures that breadth of knowledge is gained along with specialization. A major consists of 12 to 19 courses designated by a department or program. Majors must be declared prior to the beginning of the junior year.

### Majors

- Ancient Civilization
- Art History
- Biochemistry and Molecular Biology
- Biology
- Chemistry
- Communication and Culture
- Comparative Literature
- Computer Science
- Economics
- English
- Environmental Science
- Foreign Languages (French, Spanish, Combined)
- Geography
- Global Environmental Studies
- Government and International Relations
- History
- International Development and Social Change
- Management
- Mathematics
- Music
- Philosophy
- Physics
- Psychology
- Screen Studies
- Self-Designed (see below)
- Sociology
- Studio Art
- Theater Arts
- Women's and Gender Studies

### Interdisciplinary Majors

One of Clark's strengths is the eagerness of faculty and students to cross the traditional boundaries between academic fields. Interdisciplinary majors, special programs and concentrations help students to see beyond the barriers of academic specialization.



## Student-Designed Majors

While most Clark students can and do fulfill their academic goals through regularly established departments and interdisciplinary programs, the University recognizes that some students may have special interests and goals that cannot be met through normal channels. The student-designed major program is intended to provide flexibility for these students while ensuring rigorous academic standards. Students are normally expected to have a GPA of 3.0 or higher to pursue the student-designed major. Student-designed majors are coordinated by the associate dean of the college and developed with the guidance of three faculty advisers. They must be approved by the associate dean of the college by the beginning of the junior year. Guidelines for student-designed majors are available in the Dean of the College Office and in the Academic Advising Center.

## Minors

Minors give students an opportunity to gain depth in an academic area in addition to their major field of study. Minors are offered in:

- Ancient Civilization
- Art History
- Biochemistry and Molecular Biology
- Biology
- Chemistry
- Communication and Culture
- Comparative Literature
- Computer Science
- Economics
- Education
- English
- Entrepreneurship
- Environmental Science
- Foreign Languages (French, German, Spanish)
- Geography
- Global Environmental Studies
- Government and International Relations
- History
- International Development and Social Change
- Management
- Mathematics
- Music
- Philosophy
- Physics
- Screen Studies
- Sociology
- Theater Arts
- Women's and Gender Studies

## Concentrations

Concentrations allow students to cross traditional academic disciplines to gain broad perspectives on a subject in addition to their major.

Concentrations are offered in:

- Asian Studies
- Bioinformatics
- Computational Science
- Ethics and Public Policy
- Holocaust and Genocide Studies
- Jewish Studies
- Law and Society

- Peace Studies
- Race and Ethnic Relations
- Urban Development and Social Change

## Additional Academic Opportunities

### Accelerated B.A./Master's Degree Programs

Clark offers several programs that allow students to complete the requirements for bachelor's and master's degrees in an accelerated, five-year period. Students may obtain a master of arts (M.A.), master of business administration (M.B.A.), master of public administration (M.P.A.), master of science in finance (M.S.F.), master of science in professional communication (M.S.P.C.), master of arts in teaching (M.A.T.) or master of arts in education (M.A.Ed.). Students apply to the accelerated B.A./Master's degree programs in their junior year, begin meeting requirements in their senior year, and complete those requirements in the fifth year. Bachelor's degrees are granted en route to the master's degree.

For students meeting eligibility requirements, the fifth year is tuition free. To qualify for free tuition in the fifth year, a student must: be a full-time undergraduate for four years at Clark; meet bachelor's/master's course prerequisites and receive a Clark bachelor's degree within five years of initial entry into Clark; earn an overall 3.25 grade-point average during the second and third years and again in the fourth year.

Undergraduates who transfer to Clark are eligible for a 50 percent tuition fellowship during the fifth year of study. To qualify, a transfer student must begin full-time study at Clark no later than the end of the sophomore year; earn at least a 3.25 grade-point average for courses taken at Clark; maintain a 3.25 grade-point average during the fourth year; and meet program course requirements.

The University has approved accelerated programs in biology; business administration; chemistry; community development and planning; education; environmental science and policy; finance; geographic information science; history; international development and social change; physics; professional communications; and public administration.

For further information and application procedures, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate) or contact the Graduate School at (508) 793-7676.

### Preprofessional Programs

Clark University recognizes that preparation for a professional career is fully compatible with a liberal-arts education. The Prelaw Program is administered through Career Services in conjunction with a faculty advisory committee. Contact Career Services for more information. Students interested in any career related to medicine are advised through the Medical Careers Advising Program. Those specifically interested in applying to doctoral level programs of medicine or dentistry work with the Premedical and Predental Advisory Committee. For more information, contact advisory committee chair David Thurlow, Department of Chemistry.

### Internships

Students are offered the opportunity to earn credit working off campus as part of their educational program. Academic credit is offered for internships that take place under the supervision of carefully selected agency sponsors in conjunction with appropriate Clark faculty. More information on academic internships can be found on the Career Services Web pages.



Clark also participates in the Washington Semester Program with American University in Washington, D.C., and the Washington Center for Internships and Academic Seminars. Qualified students may participate in these programs and spend a semester studying and working in the nation's capital. Both programs are coordinated by Adriane van Gils, Study Abroad.

### Study Abroad

Clark University is well known for its international character and is committed to encouraging a strong Clark presence abroad, and an international presence on campus. The Office of Study Abroad Programs coordinates international study programs. Clark offers 26 semester or year-long programs in Australia, Chile, China, Costa Rica, Czech Republic, the Dominican Republic, England, France, Germany, Japan, Mexico, Namibia, Scotland, South Africa, Spain, Tasmania and Turks and Caicos. Our programs range from internships to academic programs conducted by foreign universities, and from culturally intensive to major-oriented curricula. Clark also offers two internship programs in Washington D.C.

Students may also take a leave of absence to study abroad on pre-approved programs in locations where Clark has no program of its own. Students may earn up to two units of transfer credit for pre-approved study abroad programs during the summer.

Students who study abroad on a Clark program pay the International Program Fee. Students may earn up to a full year of credit through study abroad. Interested students should contact the Office of Study Abroad Programs at Dana Commons or call (508) 793-7363 for more information.

### The Henry J. Leir Luxembourg Program (LLP-CU)

The LLP-CU provides students and faculty with opportunities for study and research in The Grand Duchy of Luxembourg in Europe. In the May Term Program, students can enroll in one of three different courses from mid-May to mid-June every year. In addition, various internships are offered, as for example, with the European Headquarters of iTunes and with the nation's leading scientific institution in environmental science. For further information, please contact Uwe Gertz at 508-793-7634.

### 3/2 Engineering Program

The 3/2 engineering program consists of three years of studies at Clark followed by two years at an affiliated engineering school. The program leads to a bachelor of arts degree from Clark after four years and, after the fifth year, a bachelor of science in engineering from the engineering school. For more information, contact program coordinator Professor Charles Agosta in the physics department.

### Colleges of Worcester Consortium

Clark is a member of the Colleges of Worcester Consortium, which means that Clark sophomores, juniors and seniors can enroll for one course a semester at Anna Maria College, Assumption College, Atlantic Union College, College of the Holy Cross, Worcester Polytechnic Institute, Worcester State College, University of Massachusetts Medical School, Tufts University Veterinary School, Becker College, Quinsigamond Community College, Massachusetts College of Pharmacy and Health Sciences, or Nichols College.

### Consortium Gerontology Studies Program

The Worcester Gerontology Studies Program is offered through the Colleges of Worcester Consortium. Courses related to aging are available at various consortium colleges, reflecting the multidisciplinary nature of gerontology. This program provides courses and internships in a coordinated curriculum leading to a certificate in gerontology. Career planning for participating students is organized through the consortium in coordination with on-campus career services.

For further information about the Gerontology Studies Program, contact program adviser Deborah Merrill, Clark Sociology Department, or the program coordinator Kelly Niles Yokum at 508-754-6829, ext. 3017.

### Academic Support Services

#### Academic Advising

The Academic Advising Center helps students plan their academic programs through a coordinated set of activities and services. Each new student is assigned a faculty adviser who helps them select courses and programs. Once a student has chosen a major, academic advising is coordinated by faculty within the student's major department.

Among the Academic Advising Center's support services are:

- **The Writing Center:** Recognizing the importance of writing in all fields, Clark offers cross-disciplinary, departmental and special Writing Center programs. Supplementing the curriculum, Clark's Writing Center provides individual tutoring and noncredit workshops for all interested students. Writing Center offerings are flexibly designed to help students at all levels achieve clear, correct, graceful writing.
- **Disability Services:** These services are designed to foster functional independence for students with disabilities. The coordinator of disability services offers advising and helps students who have submitted appropriate documentation to negotiate reasonable accommodations. An early orientation for eligible first-year students is also part of these services.

#### English as a Second Language:

##### American Language and Culture Institute (ALCI)

Clark University's American Language and Culture Institute, known to students around the world as ALCI, offers intensive ESL programs for students who want to improve their English-language skills for academic or professional reasons. Through experiential learning, students receive a thorough orientation into American culture. ALCI serves as a resource for international undergraduates, graduate and Worcester-area community students for whom English is a second language, providing further opportunities in the training of speaking the English language, orientation to American life and culture, and preparation for successful university study.

Instruction is offered at up to five levels of proficiency, beginning through academic preparation. Dedicated, trained professionals provide from five to 20 or more hours per week of intensive ESL instruction, as well as private tutorial sessions. Students are entitled to many services offered by the University including the Goddard Library, computer laboratories, athletic facilities, social activities, campus lectures and day trips to local and regional places of interest.

For more information about ALCI classes and/or programs, call ALCI at 508-793-7794.



# Tuition and Financial Aid

Tuition, board, residence-hall charges and certain fees are due and payable prior to the beginning of each semester. The dates for 2008-2009 are: July 25, 2008 for fall semester and December 12, 2008 for spring semester. Students are not permitted to register for any semester until all financial obligations have been arranged satisfactorily with the University.

A budget payment plan is available and is explained later in this section.

There is a late fee of \$50 assessed against all accounts not paid in full by the July and December due dates. In addition, interest at the rate of 1 percent per month (12.7% APR) will be charged on all past-due balances (including tuition deposit). If a student fails to fulfill his or her financial obligations and his or her account is referred to a collection agency, all fees are the responsibility of the student.

## Summary of Tuition and Other Charges for Academic Year 2008-2009

Tuition .....	\$33,900
Room (Residence Hall/Home) .....	variable
Single room .....	\$6,100
Single within suite .....	\$6,600
Double room .....	\$3,900
Double within suite .....	\$4,500
Triple room .....	\$3,900
Quad .....	\$3,900
New Resident Apartment Single .....	\$7,500
New Resident Apartment Double .....	\$5,400
Board (Compulsory for 1st- and 2nd-year students) .....	variable
Plan 19 (open to all years) .....	\$2,750
Plan 14 (open to all years) .....	\$2,600
Plan 10 (open to 2nd, 3rd, 4th and graduate students) .....	\$2,400
95 Block (open to 3rd, 4th and graduate students) .....	\$2,150
Charges That Apply to New Students Only: .....	if applicable
Application Fee (undergraduate) .....	\$55
Contingency Deposit (refundable) .....	\$50
Orientation Fee .....	\$200
International and Early Arrival Orientation Fee .....	\$250
Transfer Orientation Fee .....	\$100
Spring Orientation Fee .....	\$100
Other Fees: .....	if applicable
Student Activity Fee .....	\$320
Clark Student Health Insurance	
***Billed in Fall Semester only*** .....	\$1166
Deposits .....	if applicable
Admissions Deposit .....	\$300
Residence Hall Deposit .....	\$100
Tuition Deposit (upper class students) .....	\$300

*Note: Costs are subject to change year to year.*

## Payment Options

Clark offers several payment alternatives to the usual tuition payment each semester. These options may be used individually or in combination with each other to best suit the needs of Clark families.

- 1. Monthly Payment Plan:** Clark University, in cooperation with Tuition Management Systems, makes available a flexible, interest-free payment plan. This plan allows a family to make 10 equal monthly payments beginning in June. You determine the amount of the bill to be covered-all or only a portion. The \$60 application fee is the only charge. Tuition-payment insurance is automatically included.
- 2. Tuition Inflation Hedge:** Under this program, Clark University offers families the option of fixing the tuition rate for four years at the first-year level. To do so, families pay four years of full tuition during the first year, at the current rate, avoiding any increases in tuition for the following three years.

For more information and an application, please contact the University Registrar and Director of Student Accounts at (508) 793-7498.

All past balances will be subject to an interest charge of 12 percent per year.

## Refund Policies

### General Refund Policy

Students who officially withdraw or take an official leave of absence from the University are required to submit paper work to the Dean of Students Office. A student who officially withdraws during the first one-tenth of the semester will be charged 10 percent of his or her tuition, room, board and mandatory fees; after the first tenth, but before the end of the first quarter, the student will be charged 50 percent; after the first quarter, but before the end of the second quarter, the student will be charged 75 percent. There is no reduction in charges after the second quarter of the semester. If a student withdraws from school, but continues to avail himself/herself of services, he/she will be charged for those services.

### Study-Abroad Refund Policy

Due to the special conditions for payments to overseas programs, a different policy is necessary. Students who are studying abroad should refer to the documentation provided when they are accepted in the program for specific information on the refund policy.

### Medical Refund Policy

If a student's doctor recommends that he/she leave the University for medical reasons within the first half of the semester, and later a decision is made that the student must officially withdraw, charges are calculated in accordance with the schedule above under "General Refund Policy" based on the date of the doctor's initial recommendation that the student leave the University. The doctor's letter must be an original on letterhead.

### Normal Program and Course Load Variance

A normal full-time academic program is eight course units per year (four course units per semester). Students may elect to vary this pattern by taking three course units during any semester. A course load of three units per semester is considered full-time and is billed accordingly. Juniors and seniors who have received College Board permission



may choose to take five course units in a semester at no additional charge. (Any courses approved by College Board beyond 5 units will carry an additional cost.) All students must complete a minimum of seven full-time semesters to meet degree requirements. Students may enroll in two units per summer. While there is no limit to the total number of summer courses students may take, normally only four units may be counted toward graduation.

Seniors in their last semester are expected to take the necessary number of units (up to five) for their degree. Full-time first-year or transfer students in their first semester at Clark University must enroll in a four-unit program. Students re-entering the University or returning from leaves of absence also must enroll in a four-unit program during their first semester.

### **Orientation Fee**

A fee of \$200 is assessed to all new students to cover services and activities provided during orientation. Early orientation is \$250 and spring orientation is \$100.

### **Contingency Deposit**

All new undergraduates are required to pay a \$50 deposit to cover minor charges, such as unreturned library books, which may be incurred during the year. Students are billed each year for whatever charges are incurred. The balance is refunded upon completion of studies.

### **Housing Deposit**

The \$400 fee submitted by first-year students to Admissions includes a \$100 housing deposit. The deposit is credited towards the yearly housing fee and is nonrefundable.

### **Application Fee**

A fee of \$55 must accompany the application for admission to the University. It is not refundable.

### **Student Activity Fee**

A fee of \$160.00 per semester, levied and administered by the Student Council, is required of all matriculated undergraduates except those on a program of study abroad. The Student Council allocates funds to student organizations that provide a wide range of cultural, social and recreational activities.

### **Admission Deposit**

For entering students planning to live on campus, a nonrefundable admission deposit of \$300 and a housing deposit of \$100 are required to indicate acceptance of an offer of undergraduate admission. For students planning to live off campus, only the \$300 admission deposit is required. Deposits are credited toward charges for the first semester in attendance at Clark. Deposits are forfeited if the student does not enroll for the specified semester.

### **Tuition Deposit**

A deposit of \$300 is required of all students planning to return to the University for their sophomore, junior or senior years. It is payable by June 1 and is credited toward charges for the fall semester. The deposit of \$300 is forfeited if the student does not enroll for the specified semester.

### **Clark OneCard**

An identification card is issued during orientation to all new students without charge and is an official college ID. The Clark OneCard looks like an ordinary University ID, but it's much more than that. The wide magnetic strip on the back of the Clark OneCard acts as a key to a number of services on campus including access to residential and academic buildings, athletic facilities, Dolan Field House, Dana Commons, Goddard Library, meal plans, computer account password and the CashCard Program. Also on the back of your OneCard, the WOO card has been integrated. The WOO card is your discount pass to much of Worcester's cultural scene [www.woocard.org](http://www.woocard.org).

The CashCard Program works like cash and can be used at both on- and off-campus venues. On-campus venues include Clark Dining Hall, Higgins Bistro, Clark Print & Copy Center and Clark Bookstore. Off-campus venues include Domino's Pizza and Fantastic Pizza.

The cardholder should report a lost or stolen card immediately to University Police, the food-services provider on campus, or the OneCard office located at 22 Downing Street, 2nd floor. A fee is charged to replace lost cards.

### **Keys and Key Security**

Room keys, mailbox combinations and residence-hall entry cards are issued to students upon arrival at Clark. Fees are charged for the replacement of keys and cards that are lost during the year, and it is mandatory to return room keys and entry cards before leaving campus at the end of the academic year.

### **Financial Aid**

The Office of Financial Assistance provides guidance to all students who need assistance financing their Clark education. Financial aid is allocated on the basis of financial need and academic performance. Special talent in music, art and other areas, as well as leadership ability, are also considered. The Office of Financial Assistance assesses each student's financial circumstances and need through a uniform analysis of the Free Application for Federal Student Aid (FAFSA) for federal and state funds, and the PROFILE Form for institutional funds. When required, adjustments are made in accordance with University policies and procedures. The assessment takes into account family income and assets, age of parents, financial commitments to other dependents and members of the family, and other circumstances.

The University expects that a student's resources for education will come first from family and his/her own savings and earnings. The University will make every effort to assist most students in obtaining the difference between the total cost and expected family resources. No student should fail to apply for admission to Clark University because of the inability of his/her family to pay total educational costs.

### **Student Employment**

Student employment opportunities at Clark include on- and off-campus part-time jobs and full-time summer employment, coordinated by the Office of Financial Assistance. At the beginning of each semester, Clark students with federal work-study awards receive a listing of available on-campus jobs and may choose a job best suited to their abilities and interests. It is important to note that an offer of Federal Work Study as part of a student's financial-aid package is not a guarantee of



that amount, but rather a limit of potential earnings. Students receive paychecks for actual hours worked, which can be used for personal expenses, books and supplies, or saved for future bill charges. The Office of Financial Assistance also maintains a list of on- and off-campus jobs available to students not receiving federal work-study awards.

### Independent Sources of Aid

All applicants for financial aid are urged to pursue independent sources of financial aid. Clark cannot replace outside funds for which a student is eligible but fails to apply. Scholarships are often awarded to graduating seniors by high schools and/or private scholarship agencies in students' local communities. Additional information usually is available in guidance offices or online at [www.fastweb.com](http://www.fastweb.com).

Any assistance received from outside sources other than Clark University must be reported to the Office of Financial Assistance on the Award Acceptance Agreement form or in writing to the Office of Financial Assistance. These awards may affect your Clark financial-aid package.

Clark's policy for these adjustments is as follows:

- For scholarships derived from meritorious sources that are in recognition of a particular achievement of the student, unmet institutional need will be filled first. Any remaining scholarship will reduce loan, then work-study. If there is additional remaining scholarship, it will reduce Clark grant, dollar for dollar.
- Private grants/scholarships derived from nonmeritorious sources (state or federal grants or tuition subsidies based on parents' employment) will reduce Clark grant, dollar for dollar.
- An important source of federal financial aid is offered in the form of Federal Pell Grants. These grants, which vary in amounts, are available to certain students who demonstrate financial need according to federal methodology.
- Federal Stafford Loans are available to all students, regardless of need. Students may borrow up to \$3,500 their freshman year, \$4,500 sophomore year and \$5,500 the junior and senior years of an undergraduate program. Students may borrow up to \$20,500 per year of a graduate program. The subsidized version is limited to students who demonstrate financial need according to federal methodology. The interest rate on the subsidized Stafford loan is fixed at 6.0%. No payments are due nor does interest accrue, until after graduation or until a student is enrolled less than half time. Payments may be deferred for continued education. The unsubsidized version offers some of the same terms and conditions; however, interest begins to accrue during the in-school period and is set at 6.8%.
- Veterans' benefits may be available for service veterans and children of deceased or disabled veterans. Eligibility can be determined by contacting the local Veterans Affairs Office.
- Rehabilitation assistance may be available for students who qualify for educational benefits. Information concerning rehabilitation services can be obtained at the Massachusetts Rehabilitation Commission Office.

### Aid Awarded by Clark University

Clark University makes a financial-aid commitment to entering students during their first year and in each subsequent year at Clark, as long as they continue to demonstrate financial need, continue to meet the standards of satisfactory academic progress, have filed all necessary application materials by the required deadlines and have not exceeded program limitations of financial aid, and as long as federal and state funding to Clark's Office of Financial Assistance continues at the same level. Although any Clark student may apply for aid as an upperclass student, funding is guaranteed only to those students who received aid their first year at Clark and have met the above requirements.

Assistance at Clark is packaged in the form of scholarship, loan, grant and/or employment from the following sources:

- **Alumni and Friends Scholarship Program**—A portion of the University income is reserved for this purpose, and gifts from alumni, parents and friends provide additional scholarship funds. Eligibility for Clark Scholarships is determined under institutional methodology used in the analysis of the aid application materials.
- **Federal Supplemental Educational Opportunity Grants**—One of three campus-based federal-aid programs available to college students demonstrating exceptional financial need. Continued support of this program is contingent upon annual Congressional allocations.
- **Federal Perkins Loans**—One of three campus-based federal-aid programs available to college students demonstrating exceptional financial need. Loans made under this program carry a fixed 5 percent interest rate. Payment of principal and accrual of interest is deferred until after graduation or until a student is enrolled less than half time. The loans carry a 10-year repayment schedule with a \$40 monthly minimum. Continued support of this program is contingent upon annual Congressional allocations and the repayments of previous recipients.
- **Federal Work Study**—One of three campus-based, federal, student-aid programs, this work program gives eligible students the opportunity to work during the school year to earn money for personal expenses, travel, books and supplies; and over the summer towards the following school year's educational expenses.
- **Presidential and Achievement Scholarships**—Awarded to incoming students based on specific academic criteria, all recipients of these scholarships are selected as part of the admissions application process. All scholarships are renewable if a student meets certain academic criteria while at Clark University.

### Satisfactory Academic Progress

Students receiving federal financial assistance of any type (including parent loans) are required to make "satisfactory academic progress" toward their degree. Satisfactory academic progress is defined by regulations of the U.S. Department of Education as "proceeding in a positive manner toward fulfilling degree requirements." This is differentiated from "academic standing," which refers to students whom the institution allows to continue to enroll.

Full-time bachelor's degree candidates must maintain a 2.0 cumulative grade-point average and complete five courses the first year; six courses the second; and seven courses each year thereafter. These

requirements are prorated for less than full-time students and students attending less than a full academic year. Evaluation of satisfactory academic progress is made at the end of each spring term.

Students who are determined not to be making satisfactory academic progress are allowed one semester of continued assistance under probation status in order to obtain the necessary requirements for maintaining progress. If students are still not making progress after one semester of probation, aid is discontinued. Students are allowed only one semester of probation while at Clark. Appeals to this policy for special and unusual circumstances may be made in writing to the director of financial assistance.

Students are limited to eight undergraduate semesters of institutional (Clark) financial aid, unless otherwise approved by the director. Appeals should be written to the director of financial assistance.

#### **Return of Title IV Funds (federal and some state financial aid)**

Title IV fund rules assume that a student earns his or her aid based on the period of time he or she remained enrolled for the term. Unearned aid, other than work-study, must be returned to the U.S. Department of Education up until the 60-percent point in the term. At the 60-percent point in the term, the student is considered to have earned all of his or her aid.

#### **Return of Institutional Financial Aid**

Students are allowed to retain institutional financial aid (Clark grants and scholarships, including academic scholarships) at the same rate that the credit-to-tuition (refund) policy is calculated. That is to say, a student leaving or withdrawing in the first tenth of a semester has earned 10 percent of their institutional financial aid, students leaving or withdrawing in the first quarter are allowed to retain 50 percent of their financial aid, students withdrawing during the second quarter may retain 75 percent of their aid, and students leaving or withdrawing after the second quarter may retain 100 percent of their Clark financial aid.

#### **Financial Assistance for International Students**

The Admissions and Financial Aid Committee, in keeping with Clark University's commitment to a prevalent international presence on campus, provides financial assistance to a limited number of international students each year. Competition for this assistance is extremely keen and the awards are based on both academic merit and financial need. Since the ability to meet the cost of attendance at Clark University must be taken into consideration, the admissions process is need-aware. Several applicants each year show excellent academic records but do not demonstrate the financial ability necessary to meet the full cost of attendance. It is not unusual for the committee to deny an application on financial grounds even though the applicant is academically qualified. International scholarships are applicable to study while in residence at Clark and generally cannot be used to participate in off-campus study programs.

# Undergraduate Admissions Requirements



#### **First-Year Student Admission**

Clark University welcomes applications from men and women regardless of race, color, sex, sexual orientation, religion, age as defined by law, handicap, national origin or financial condition. Selection is competitive and based primarily on academic promise as indicated by secondary-school performance, recommendations and standardized test (SAT, ACT) scores. Secondly, decisions reflect consideration of the individual experience and particular circumstances unique to each candidate.

#### **Entrance Requirements**

A diploma from an accredited secondary school or G.E.D. equivalency is required for admission to Clark. The academic preparation for successful candidates should include four years of English; three years of mathematics; three years of science; two years of both a social science and a foreign language; and other credit electives recognized in the secondary-school curriculum. The University is most concerned with the strength of the student's academic program and therefore recommends this framework of courses. However, the University values diversity and understands that some students may be following different high school-curricular patterns.

#### **The Application**

Students applying to Clark may use the Common Application or Universal Application. The admissions staff has no preference for any particular application form, but may request supplemental information when needed. A nonrefundable application fee of \$55 or official fee-waiver request must accompany the application. Transfer students should contact the Admissions Office for specific supplemental forms.

Clark University  
Admissions Office  
950 Main Street  
Worcester, MA 01610-1477  
Telephone: 508-793-7431  
Fax: 508-793-8821  
E-mail: [admissions@clarku.edu](mailto:admissions@clarku.edu)

Students applying for financial assistance should refer to information provided in the "Undergraduate Tuition and Financial Aid" section of this catalog.

#### **Early Admission**

Exceptional students are welcome to apply for early admission after the junior year of high school when encouraged and supported by enthusiastic recommendations from their secondary schools.



### **Early Decision**

If Clark University is clearly your first choice, we encourage you to apply “Early Decision.” By signing the Early Decision statement you agree that, if admitted, you will withdraw all other college applications. The Early Decision deadline is November 15, with notification by early January. A candidate who is deferred under Early Decision will automatically be reconsidered for regular admission in March.

### **Regular Admission**

Candidates for admission in September should apply as early as possible, usually during the first grading period of their final year of secondary school. The deadline for applications and supporting credentials is Jan. 15 (Nov. 1 for January admission).

### **Admission Tests**

All U.S. first-year students are required to submit results of the SAT I or American College Test (ACT).

If English is not your first language, you should submit scores from the Test of English as a Foreign Language (TOEFL) regardless of your citizenship. Successful candidates score between 80-120 on the iBT (550-677 on the paper version). (See section on International Admissions.)

### **Interviews and Campus Visits**

Interviews are not required but are strongly recommended. The most informative way to learn about Clark University is to spend a day on campus. Prospective students are invited to take tours, sit in on classes and meet students and faculty members. Please call, write or e-mail the Admissions Office for information regarding interviews, tour schedules and directions.

If you cannot visit the campus, we encourage you to consider speaking with one of the University’s alumni admissions representatives. Contact the Admissions Office for details.

### **Admission Notification and Deposits**

Admissions decisions for Fall are mailed to first-year applicants by April 1 (Overseas applicants will be notified by email). Clark subscribes to the Candidate’s Reply Date of May 1 and requires a nonrefundable deposit that is credited toward first-semester charges. Spring applicants can expect to receive an admission decision by mid-December with the deposit due within two weeks of notification.

### **Deferred Admission**

Students who want to postpone enrollment must submit a request in writing by May 1st. A nonrefundable deposit that is credited toward first-semester charges is required. Students who undertake full-time academic work in the interim may not defer enrollment but must reactivate their applications and submit official transcripts for review.

### **Advanced Standing**

Students may earn up to one semester of advanced standing credit by submitting scores of 4 or 5 on Advanced Placement (AP) tests administered by the College Entrance Examination Board or by transferring credit from college-level coursework. Students who earn a diploma through the International Baccalaureate program may be eligible for a full year of advanced standing credit. Please contact the admissions office if you have any questions about specific program in which you are participating.

### **International Admission**

Students applying to Clark may use the Common Application or Universal Application. The admissions staff has no preference for any particular application form, but may request supplemental information when needed. A nonrefundable application fee of \$55 or official fee-waiver request must accompany the application. Because of the sequential nature of University courses, Clark allows all international students to apply for the fall semester only (deadline January 15).

The Test of English as a Foreign Language (TOEFL) is required of all candidates whose native or official language is not English. Information concerning test dates and locations may be obtained at [www.toefl.org](http://www.toefl.org). The Certificate of Eligibility (I-20 form) necessary to obtain a student visa will be granted only after full admission and receipt of complete financial documentation (in the form of an official bank statement indicating a monetary amount).

### **Transfer Admission**

Clark welcomes applications for admission with advanced standing from students attending two- and four-year institutions. Transfer applicants may use the Transfer Common Application. The Application Supplement must also be submitted. Applicants for Fall should file by April 1; Spring applicants by November 1. All transfer candidates are required to submit evidence of good standing, complete transcripts of all previous academic work—secondary and postsecondary—including standardized tests (if taken) and any other information requested by the Admissions Committee, such as recommendations and course catalogs.

Normally, credit is given for academic courses in the liberal arts previously taken at regionally accredited colleges and universities and by advanced standing procedures, described above. No credit is given for grades lower than C. Evaluation of credits for college courses is made at the time of admission or upon receipt of final transcripts and is used in planning a program of study at the University. Up to 50 percent of Clark’s degree and major requirements may be awarded on a transfer credit basis, and a minimum of two academic years at Clark is necessary for completion of degree requirements.



# Requirements for a Bachelor's Degree



Academic credit toward the bachelor of arts is expressed in terms of course units. Each Clark course is awarded one unit. To earn a bachelor's degree, a student must complete a minimum of 32 course units with a minimum overall 2.0 grade-point average. No more than four D or D+ grades can be counted toward the degree. Bachelor's degree candidates must also successfully complete all institutional, major departmental and Program of Liberal Studies requirements for graduation. Transfer credit for students with fewer than 32 course units in residence is established by the Transfer Evaluation Committee. Students may accelerate their progress toward graduation by no more than one semester without special approval of the College Board. For the purpose of transfer, a full Clark unit is equivalent to four semester hours of credit.

## Transfer Credit

To earn a bachelor's degree at Clark, a student must earn at least one half of the total number of course units taken for fulfillment of a major in a Clark program. Students must be enrolled full time at Clark for both semesters of their senior year. Units earned through Clark programs off campus also meet the requirement. "External credit" is credit earned in the following categories:

1. Advanced placement
2. Credits transferred from other American colleges and universities
3. Credit earned in foreign-study programs administered by American or foreign institutions of higher learning other than Clark.

The amount of transfer credit that can be applied to a bachelor's degree at Clark is limited by category.

1. No more than one semester (four units) may be granted in advanced placement (A.P.). A.P. credit is defined as one unit of degree credit assigned for a score of 4 or 5 on a CEEB A.P. examination taken prior to matriculation and before the student formally enrolls. Students also may receive credit for college work completed prior to their matriculation at Clark University if that credit is in a content area deemed academically acceptable to Clark and is from an accredited college or university.
2. Students who present an International Baccalaureate (IB) Diploma and who also earn a minimum of 36 composite points with a score of 5 or higher in all six of their IB examinations will receive eight Clark units (one full year). Students who present an IB Diploma (a minimum of 24 composite points) will receive four Clark units (one semester). Students who do not complete the full IB Diploma will receive one Clark unit for each higher level examination with a score of 5 or better up to a maximum of four Clark units (one semester).

3. Students transferring to Clark from another institution may transfer in no more than 16 units of course credit. Students who begin their course work at Clark may subsequently transfer up to 12 units of course credit from other schools.
4. Normally, no more than one year (eight course units) may be taken in study-abroad programs.

## Academic Regulations

Full-time study is defined as a three- or four-unit program. Normally, undergraduates enroll in four courses per semester. Students should consult their faculty advisers, or in some cases, the Academic Advising Center or major departments when questions about course or program selections arise. With approval from the College Board, juniors and seniors with a minimum GPA of 3.0 in their prior semester, or with a minimum cumulative GPA of 3.0, may enroll in a fifth course.

While first-year students and sophomores may choose any course designated by a department as open to them, 200-level courses are normally designed for juniors and seniors. Juniors and seniors may elect any 100- or 200-level course, provided they have met all required prerequisites and have the permission of the faculty member, if necessary.

Undergraduates may be admitted to 300-level graduate courses with the approval of the instructor.

## Grades

Grades are an indication of individual performance in each course taken at the University. At Clark, four grading options are currently in use:

1. **Graded courses:** This option uses the symbols A, B, C, D, and F with the modifying symbols "+" and "-" for A, B, and C. The lowest passing grade is D.

The faculty has approved the following qualitative description of grades:

- A indicates work of distinction, of exceptionally high quality
- B indicates good work, but not of distinction
- C indicates average work and satisfaction of University degree requirements
- D indicates marginal work
- F indicates unacceptable work

2. **The Pass/No Record Option:** This option uses the symbols P and NR. P indicates work at a level of C- or better. Neither the P grade nor its credit is included in the calculation of the grade-point average. Performance below a C- results in a No Record (NR) grade. NRs do not appear on students' transcripts. Students must choose this grade option during the add/drop period. There is no limit to the number of NR grades that a student may receive. However, NR grades do not carry credit and are not counted toward graduation or University requirements.
3. **The Credit/No Credit Option:** This grading option, assigned by the University to a course, uses the symbols CR/NC. CR indicates work at a level of C- or better. The NC is treated like an F.



Grade-point averages are calculated by the University to determine academic good standing, semester academic honors, Latin honors at graduation and eligibility for various honor societies. The grade-point average is calculated as the average of grades earned in all Clark University graded courses. Neither external credit nor ungraded Clark University courses are included in this calculation.

### **Pass/No Record Option**

The availability of the pass/no record option is designed to offer students the opportunity to take a course, usually unrelated to their major, without risking a negative impact on their GPA.

All students should bear in mind that the majority of graduate and professional schools encourage applicants to have graded courses. Preprofessional students and those for whom graduate school is a goal should exercise caution in selecting the pass/no record option. Students who are interested in attaining honors, such as Phi Beta Kappa, Dean's List and Latin honors at graduation, also should exercise the option cautiously.

### **Noncredit Audit Status**

With the permission of the instructor, full-time degree students are eligible to audit one course per semester. There is no additional charge for this privilege. Part-time matriculated students also may register as auditors with the permission of the instructor and the payment of a per course fee. In limited or sectioned courses, regularly enrolled Clark students are given preference for available openings.

Matriculated students who successfully complete audited courses (as determined by the instructor) will have the audited courses posted on their permanent records.

### **Withdrawal from Courses**

A student may withdraw from a course at any time during the add/drop period without having a W recorded on his or her transcript. Students may withdraw from a class up until the end of the tenth week of classes, but any withdrawal after the add/drop period will result in a W being recorded on the transcript. Students compelled to withdraw from a course due to exceptional circumstances (e.g., serious illness) may petition the College Board for a WR grade (withdrawal with reason.)

### **Incompletes**

A record of incomplete may be permitted by approval of the College Board only when sickness or some other unavoidable circumstance prevents completion of the course. Individual instructors may not assign incompletes without College Board approval. A record of incomplete incurred in the fall semester must be made up no later than the following April 1; if incurred in the spring semester, it must be made up no later than the following Oct. 1. If a course is not completed within the specified time, the record of incomplete is changed to F.

### **Registration**

All students are expected to register in November for the spring semester and again in April for the following fall semester. Registrations must be finalized by the end of each semester's add/drop period. Notification of the dates for registration is given, and failure to register within the announced period results in a late fee.

### **Examinations**

Final examinations are given at the end of most courses.

Approximately one week is set aside for each examination period, and an attempt is made to distribute examinations for individual students evenly throughout this period. Absence from a final examination, except for the most compelling reasons, may result in a failure for the course.

Comprehensive final exams are not to be given (or due) during the last week of class, nor during the scheduled reading period. Other examinations and tests may be given at any time during the course at the discretion of the instructor.

### **Class Attendance**

There is no university-wide class attendance policy. However, many individual instructors do set attendance requirements for their courses.

### **Student Absence Due to Religious Beliefs**

According to Massachusetts state law, any student who is unable, because of his or her religious beliefs, to attend classes or to participate in any examination, study or work requirement on a particular day, will be excused from that requirement. He or she will have an opportunity to make up any examination, study or work requirement missed because of such absence, provided the makeup examination or work does not create an unreasonable burden on the University. No fees will be charged by the University for making such opportunities available. No adverse or prejudicial effects will result to any students availing themselves of these provisions.

### **Course Changes**

Students may add and drop courses during each semester's add/drop period. Thereafter, a student may enter a course only with the permission of the instructor and the College Board.

### **Partial Programs**

In special circumstances, students may be permitted by the dean of students to register for a semester program of fewer than three course units. These students are designated as part-time students.

### **Guest and Special Students**

Guest students from other colleges and universities who want to study at Clark for one or two semesters, and special students who want to take only a few courses without enrolling as degree candidates, may seek approval to do so. Students who wish to enroll as guest students should contact the Admissions Office. Those interested in special student status should contact the Registrar's Office.

### **Academic Standing**

Academic standing is reviewed each semester and is based upon performance during the previous semester. All students are required to pass at least two courses each semester and to maintain a 2.0 grade-point average. In order to remain in good academic standing, first-year students must complete at least five courses with a minimum 2.0 grade-point average by the conclusion of their first year. Sophomores, juniors and seniors must complete at least six courses with a minimum 2.0 grade-point average for the year. In addition, students may earn no more than four D or D+ grades for credit towards graduation. Students



who fail to meet these requirements will be placed on academic probation for the next semester for which they enroll at the institution.

Students who do not maintain good academic standing may be placed on academic probation or may be dismissed by the College Board. The progress of students, who are placed on academic probation, is reviewed by the board at the end of the semester on probation.

Students on probation are expected to complete four courses with a 2.0 average or face a required withdrawal for the subsequent semester. A second required withdrawal requires the student to complete two courses at another institution within one semester with grades of C or higher, prior to their application for readmission to Clark. A third required withdrawal is final.

### **Academic Integrity**

Academic integrity is a basic value for all higher learning. Simply expressed, it requires that work presented must be wholly one's own and unique to that course. All direct quotations must be identified by source. Academic integrity can be violated in many ways: for example, by submitting someone else's paper as one's own; cheating on an exam; submitting one paper to more than one class; copying a computer program; altering data in an experiment; or quoting published material without proper citation of references or sources. Attempts to alter an official academic record will also be treated as violations of academic integrity.

To ensure academic integrity and safeguard students' rights, all suspected violations of academic integrity are reported to the College Board. Such reports must be carefully documented, and students accused of the infraction are notified of the charge. In the case of proven academic dishonesty, the student will receive a sanction, which may range from an F in the assignment or course to suspension or expulsion from the University.

### **Leaves of Absence**

A student who is in good standing may apply to the dean of students for a leave of absence, after which he or she may return to the University without formal application for readmission.

### **Withdrawals**

Students who fail to enroll without taking a formal leave of absence will be administratively withdrawn from the institution. To be considered for readmission, students must apply to the dean of students.

### **Departmental Honors**

Students may be admitted to a program leading to a bachelor's degree with honors in a particular major at the beginning of the junior year or, in some cases, at the beginning of the senior year. In most cases, each student will work with a faculty member who serves as his or her honors adviser and assists with planning the honors research and thesis during the student's junior and senior years. The program may include a maximum of six courses in which the student works under the adviser's supervision. In some cases, students must pass a comprehensive examination given by the department in the senior year.

Students should check with the major department to obtain guidelines for the specific requirements for honors before the end of the sophomore year (although in some departments, applications for honors may be made in the second half of the junior year).

Admission to an honors program does not relieve students of any of the standard major requirements. A student's candidacy for honors will be terminated at the end of any term in which he or she has not maintained a standard of work satisfactory to the department. If candidacy is terminated for any reason, the amount of course credit to be allowed for honors courses will be determined by the College Board.

The department may recommend that a student graduate with honors, high honors or highest honors. Consult individual departments for details concerning acceptance into their honors programs.

### **University Honors**

Each semester, the dean of the college publishes a list of students who have distinguished themselves by outstanding academic performance in the preceding semester. Honors are awarded to the top students in each class based on semester grade averages.

Upon graduation, Latin honors are awarded at three levels: cum laude, magna cum laude, and summa cum laude. Latin honors are based on the following cumulative grade-point averages: summa cum laude, 3.80 and higher; magna cum laude, 3.60-3.79; and cum laude, 3.40-3.59. Also, to be eligible for Latin honors, students must have completed at least 75 percent of their Clark courses with a letter grade.

Honor societies at Clark include the Society of Phi Beta Kappa, founded at the College of William and Mary in 1776 and dedicated to the recognition and encouragement of outstanding scholarly achievement in liberal studies. The Clark chapter, Lambda of Massachusetts, was established in 1953. Every year a select group of seniors and juniors, who exemplify what the constitution of the United Chapters of Phi Beta Kappa describes as "high scholarship in the Arts and Sciences and good character" are invited to join the Chapter. Selection is made on the basis of overall academic achievement, as well as breadth and depth of studies in the liberal arts. To be eligible, students must have studied a second language and have done course work in science and math that satisfies Clark's perspective requirements for the Program of Liberal Studies. Elections are held in the spring semester. A committee of faculty members who are members of PBK determines the final selections on the basis of the academic records of candidates and recommendations from the faculty at large.

Gryphon and Pleiades is the senior honor society at Clark. Its 12 members include students who have outstanding records of academic achievements and leadership in campus extracurricular activities.

The Fiat Lux Honor Society was created in 1988 as a student honor and service society recognizing combined qualities of scholarship and citizenship among Clark juniors and seniors. Qualifications for selection include a minimum 3.3 grade-point average and significant community service.



# Facilities



## Campus Libraries

The **Academic Commons at Goddard Library**, formerly the Robert Hutchings Goddard Library, named for the Clark physicist who invented the rocket technology that made space travel possible, Goddard Library is currently being transformed into the Academic Commons at Goddard Library. The project will reshape the University's main library into a cutting-edge facility for research, teaching and learning by centralizing academic and research support services for students and faculty. The project includes a complete renovation and redesign of existing space and addition of 11,000 square feet achieved by enclosing the plaza level. The Academic Commons will continue to provide traditional and electronic resources, including Goddard's collection of more than 600,000 volumes, 300,000 monographs, subscriptions to 1,500 periodicals, full Internet access, 70 subject-specific databases and a public online catalog available 24-hours a day. The Academic Commons will also continue to house an Archives and Special Collection area.

As a member of the Colleges of Worcester Consortium, Clark offers students the use of eight academic consortium libraries and a combined local collection of more than 3.5 million volumes.

The **Guy Burnham Map and Aerial Photography Library**, founded in 1921, is an active cartographic information center. The collection, global in scope, contains over 200,000 maps and 7,500 aerial photographs, as well as atlases, journals, globes, map reference materials and tourist information. A depository agreement with the U.S. Government Printing Office insures the availability of a full array of U.S. government maps. The library is located on the lower level of the Geography Building.

The **Carlson Science Library**, a branch of the Goddard Library, serves the disciplines of biology, chemistry and physics. Located on the top floor of the Sackler Sciences Center, it houses selected science journals and a research collection of recent monographs. Full Internet access and subject-specific databases are provided.

The **Jeanne X. Kasperson Research Library** offers one of the most extensive collections in North America of research materials on natural and technological hazards and environmental change. The library's collection, developed over the past two decades, now houses more than 20,000 volumes, including books, technical reports and government documents. Approximately 50 percent of the collection is bibliographically retrievable via the Internet, and the remainder is retrievable on site via internal databases. Holdings also include in excess of 1,500 hearings and reports of the U.S. Congress, 600 reports of the U.S. General Accounting Office, and over 2,000 specific articles on development. In addition, the library receives some 300 journals, newsletters and other periodicals. The Jeanne X. Kasperson Research Library also regularly obtains and catalogs a wide range of publications on relevant subjects from international, national and subnational institutions.

## Information Technology

At Clark, information technology permeates all aspects of campus life. E-mail and Web systems provide online access to information, services, communication and collaboration. The high-speed campus data network connects all campus buildings, including residence halls, to the Intranet; and wireless "hot spots" support laptop mobility around campus. Classrooms are networked and multimedia capable. Student computer labs provide access to specialized programs used in courses. Videoconferencing connects the campus to other locations, universities and laboratories. Walk-up kiosks provide quick network access as individuals move about campus.

Clark students, faculty and staff routinely utilize this computing and networking environment in their day-to-day activities. Students register for classes and access their records through Clark's Web services portal, CUWeb. Students, faculty and staff use e-mail for personal and University communications. The University's Intranet (known as Clark Commons) provides access to comprehensive campus information, services, directories and forums. Faculty and students utilize Clark's online course management system to access course materials and participate in online discussions. Faculty and students use the multimedia resource lab to produce the multimedia content for their courses and other electronic communication vehicles. Select campus events are webcasted and archived for playback on demand. Student organizations initiate online discussions and "straw polls" on the Intranet forum, where any individual may participate.

Automated systems support the entire range of University administration and operations. Campus service departments offer information and access to services via the Clark Web site; and academic departments publish full descriptions of majors and programs along with faculty profiles.

All faculty and staff are provided with networked computers. Most students bring a computer to campus. Student computer labs and kiosks are also provided throughout the campus, supporting the curriculum and complementing students' personal ownership. Desktops and laptops; Windows and Macintosh; wired and wireless—all are supported. The University provides information and assistance to help students, faculty and staff acquire computers and software at the best prices. Consulting, troubleshooting and training resources are also provided, including evenings and weekends.

These systems and services, for which students are charged no extra fees, are provided to the Clark community by Information Technology Services.

## Science Facilities

Clark's science facilities include the Cathy '83 and Marc '81 Lasry Center for Bioscience, as well as the newly renovated Arthur M. Sackler Sciences Center and the Computer Science, Mathematics and Physics Building. The Lasry Center for Bioscience is a 50,000-square-foot building that houses teaching laboratories, lecture halls, faculty offices and research laboratories used by faculty and students in biology and the biochemistry and molecular biology programs. Completed in 2005, Lasry Center has received Gold certification by the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.



The Sackler Sciences Center and the Computer Science, Mathematics and Physics Building include many newly renovated research, teaching and office spaces used by faculty and their students in biochemistry and molecular biology, chemistry, environmental science, physics, mathematics and computer science.

All of these facilities feature:

- Research laboratories used by faculty in their research involving undergraduate and graduate students
- Flexible teaching laboratories well-equipped with state of the art technology, which accommodate a variety of instructional approaches
- Classrooms and seminar rooms that incorporate modern technology and facilitate interactions among students and between faculty and students
- Common use spaces that promote collaboration and collegiality

The science facilities also house a centralized science library, computer facilities including a parallel computing cluster, and a variety of shared-use state-of-the-art equipment including an automated DNA sequencer, an electron spin resonance spectrometer, and three high-field nuclear magnetic resonance spectrometers. The equipment is routinely used in research conducted by collaborative laboratory groups including faculty, undergraduate and graduate students.

### **Visual and Performing Arts Facilities**

The Traina Center for the Arts, which opened in August of 2002, is a state-of-the-art facility for the visual and performing arts. The complex consists of a completely remodeled late-19th-century brick school building of Richardsonian design with a newly built hall for lectures, recitals and screenings. Studios for painting, drawing and graphic design, together with a print-making studio, photography darkroom, exhibition gallery, visual resource library, multimedia center and high-tech classrooms, create an integrated environment for the study, creation, display and performance of studio art, art history, music, theater arts and film.

The Little Center Building houses primarily Theater and is devoted to the creation of theatrical performances and includes a black-box theater, experimental theater, costume shop, design workshop, practice studio and classroom. The building also includes a fully equipped sculpture studio.

Estabrook Hall contains additional facilities for the arts, including music classrooms, practice rooms, the George F. and Sybil H. Fuller Foundation Center for Music, and senior studios for advanced studio-art students.

### **Athletic Facilities**

The Kneller Athletic Center includes the Hurst Courts, a gymnasium with three full-size courts for basketball and volleyball; a newly renovated six-lane 25-yard swimming pool with one- and three-meter diving boards; four racquetball courts and two squash courts; a weight room; a training room with facilities for rehabilitation; a dance room; plus locker rooms, offices and conference rooms.

The 4,300 square-foot James and Ada Bickman Fitness Center, an addition to the Kneller Athletic Center, provides students with a cardiovascular area as well as a strength and free-weight area.

Students play outdoor sports at Russ Granger Field. Recently renovated, the area consists of six lighted PlexiPave-surfaced tennis courts and a lighted sport-turf field for varsity field hockey, baseball and lacrosse, as well as a lighted natural-grass field for soccer. The fields are also used for intramural and recreational sports. Included in the renovations was the construction of the 29,850 square-foot Dolan Field House, which provides indoor practice space, a training room, and locker rooms for visiting and home teams. The field house is also used for intramural and recreational use. O'Brien Field is the home to the varsity softball team. Clark debuted its new cross country course in the fall of 2003 when the Cougars hosted the Worcester City Meet and the NEWMAC Championship. Located about 20 minutes from campus in the neighboring town of Boylston, Clark's challenging course is set within 269 acres of woodland, forest and community park land and includes a combination of wooded trails and open fields. The new course will be used to host dual meets and invitationals. The Donahue Rowing Center, one of the largest rowing facilities on the East Coast, is the home for the men's and women's rowing program. The teams practice and compete on Lake Quinsigamond, located approximately 10 minutes from campus and considered one of the best waterways for crew competition in the country. The lake has been the site of the New England Championships, the ECAC National Championships and the Eastern Sprints Regatta.



# Student Resources



## Housing

Clark University provides housing for approximately 1,800 undergraduate and graduate students in nine residence halls and 14 houses. All first- and second-year students are required to live in University housing unless they are commuting from home, which must be within 25 miles from campus. Residential Life and Housing staff are available to assist students with a variety of personal and academic concerns. The staff strive to create a living-and-learning environment through social, recreational and educational programs. Dodd Hall is designated as an all-women residence hall. The remaining eight halls are coeducational. All residence halls are smoke free. There are three residence halls designated exclusively for first-year students. Special-interest housing opportunities include a substance-free house (called Wellness House), substance-free floors, quiet house and year-round house.

New student assignments are mailed by mid-July. Each year, returning students participate in the room selection process in April to select their rooms. Approximately, one-third of Clark students commute from home or live in private apartments in the immediate neighborhood. A limited listing of available apartments is compiled by and available at the Office of Residential Life and Housing.

## Office of Intercultural Affairs

The Office of Intercultural Affairs (OIA) develops and implements educational and co-curricular programs designed to heighten cultural awareness, appreciation of cultural diversity, and intercultural understanding for all students. The OIA also provides programs specifically to serve the needs of international students, researchers, and faculty through immigration advising and cultural adjustment programs. The OIA staff advises more than 500 international students, faculty, scholars and their dependents from over 80 countries on matters relating to immigration as well as academic, social, financial and personal concerns related to daily life in the United States.

## Academic Advancement

Clark University provides enhanced services for the ALANA community. At Clark University this acronym represents students of African, Latino/a, Asian, and Native American descent. The director of Academic Advancement assists students in the development and implementation of their academic and career goals. ALANA and first generation college students are invited to attend the ACE (Academic Clark Excellence) Summer Institute which runs prior to first year orientation. The ACE Summer Institute is designed to prepare them for the rigorous Clark experience and includes academic course previews, building a mentor network around leadership and academic relations, developing personal and social relationships with peers and understanding the community climate of Clark. ALANA students are also invited to participate in the Millennium Leadership Conference November 7, 8, 9, 2008, a conference focusing on addressing the leadership development of ALANA students.

## Army and Air Force ROTC

Clark University students may participate in Army and Air Force Reserve Officers' Training Corps at Worcester Polytechnic Institute. U.S. citizens, who are physically qualified, earn their degree from Clark University and satisfactorily complete the ROTC program, will be commissioned as second lieutenants in the U.S. Army or Air Force. Students may request an educational delay of active duty in order to attend graduate school. First-year and sophomore students can compete for two- and three-year scholarships, which are primarily based on academic performance and major. Students interested in Army ROTC should contact the Military Service Department at Worcester Polytechnic Institute (WPI). Students interested in Air Force ROTC should contact the Department of Aerospace Studies at WPI.

## Health Services

The Clark University Health Service is a primary-care outpatient clinic that provides on-campus health care to full-time matriculated undergraduate students. It is staffed by physicians, nurse practitioners, registered nurses and support staff. The clinic, located at 501 Park Avenue, is open Monday through Friday 9 a.m. to 5 p.m. There is always a physician on call when Health Service is closed.

Students may make an appointment at Health Service with a clinician for diagnosis, treatment, follow-up or counseling regarding health problems. Gynecological and contraceptive services are available.

Massachusetts law requires all full- and part-time students to enroll in a qualifying student health-insurance plan offered by the University or another health-insurance plan with comparable coverage. Failure to submit proof of comparable coverage will result in a student being automatically enrolled in the Clark plan and charged accordingly. In compliance with state law, students may not register for classes until they are enrolled in an insurance plan.

## Dean of Students Office

The Dean of Students Office is concerned with the well-being of students living and learning in a community of scholars and works to maximize the quality of student life at Clark. The staff coordinates services related to housing, residential life, intercultural-student services, international-student services, new-student orientation, wellness, health services, student activities, personal counseling and judicial affairs.

The deans are available to meet with students on the wide variety of issues that they encounter during their time at Clark. The Dean of Students Office publishes a student handbook (Synergy), which outlines student support services and the Code of Student Conduct.

## Career Services

The Career Services Office provides services and programs to assist students in making informed decisions regarding their career choices. Our professional staff offers assistance in career and graduate-school planning and in the internship and full-time job search. The following services and resources are available:

**Career Advising** — Staff is available to meet with students who want to discuss their choice of major and/or career and graduate-school plans. Career advising helps students clarify their goals, preferences, skills and interests.



**Career-Planning Events** — Workshops are conducted each semester on topics such as resume writing and interviewing skills as well as a variety of panel presentations on specific career fields. Job fairs and graduate-school events are also coordinated to provide students with the opportunity to network.

**Career Resources** — The Career Services Library contains information on career fields, internships, jobs and graduate study. Books and articles on specific job-search strategies are also available.

**Clark Career Exploration Program** — CCEP is a four-year comprehensive program where students discover their interests and skills, explore a variety of possible career paths and their requirements, and develop plans for internships, full-time employment, graduate and professional school. Through this program, students are encouraged to attend career workshops and create portfolios that creatively market their liberal-arts education to employers and/or graduate schools.

**Internship Program** — Career Services encourages students to participate in academic experiences in the field, allowing them to compare academic theory to actual practice while exploring various career options. Students may earn academic credit while working with many public, private and nonprofit organizations located throughout the country.

**Letters of Reference Files** — Career Services has partnered with Interfolio.com, an online letter-of-reference and credential-management service. For a small annual fee, students may have letters sent to the site where they will be housed until needed for employment or graduate school.

**Prelaw Advising** — The Prelaw Advising Program provides services to undergraduates considering careers in law and facilitates the entrance of qualified students into law school. The program, coordinated by Career Services, sponsors workshops, lectures and meetings, and provides informational materials for students. Watch appropriate bulletin boards and publications for announcements of important meetings and events. Students interested in pursuing law-school admission should contact Career Services or Professor Mark Miller in the Government and International Relations Department.

**Recruiting Program** — Clark students can connect with employers through on-campus company presentations, resume referrals and campus interviews. Career Services currently utilizes eCampus Recruiter, a premiere Web-based recruiting system. All students are encouraged to create their profiles and register to begin their career exploration.

**The Career Services** — Office is located on 122 Woodland Street and is open Monday through Friday from 8:30 a.m. to 5 p.m. For more information, call 508-793-7258; e-mail [careers@clarku.edu](mailto:careers@clarku.edu); or visit the Web site at [www.clarku.edu/offices/career](http://www.clarku.edu/offices/career).

## Community Engagement

The Community Engagement and Volunteering (CEV) Center is the first stop for students, faculty, and staff looking to get involved and “Make a Difference” in the Worcester community. By engaging in meaningful community service, students can make a positive difference in the lives of others, gain leadership skills, learn the value of civic responsibility, and experience the richness and diversity of the Worcester community.

The CEV Center maintains a comprehensive database of community agencies, volunteer needs, and service opportunities. The staff works closely with faculty to develop and implement community based learning courses. The CEV also advises and works with several student groups that are active in the Worcester community, including the Making a Difference Scholars.

Throughout the year, the CEV organizes many community oriented events and forums for the Clark community, including the Volunteer Fair, Food for Thought dialogue series, and Just Do It Day. To get involved, visit the CEV Center on the first floor of Corner House between the hours of 9 a.m. and 5 p.m. Monday through Friday.

For more information, call (508) 421-3785, email [cev@clarku.edu](mailto:cev@clarku.edu) or view our Web site at [www.clarku.edu/community/volunteer/](http://www.clarku.edu/community/volunteer/).

## Campus Security

The Clark University campus is served by a 12-member police force duly appointed by the Commonwealth of Massachusetts department of State Police. University Police are armed and have full arrest and policing powers.

Police take an active approach to campus security, offering students, faculty and staff educational programs on how to take precautions appropriate to an urban setting. University Police and Physical Plant maintain a network of 61 indoor and outdoor emergency telephones to ensure a quick response to security concerns. An escort service is available for students from 4 p.m. to 4 a.m. during the academic year within a quarter mile of the Clark campus. Clark University, as mandated by federal law, reports annually on the security of its campus. A copy of the Campus Security Report is available at Admissions House, University Police and on Clark's Web site.

## Varsity Athletics

Clark's 17 intercollegiate varsity teams compete as a member of the Division III National Collegiate Athletic Association (NCAA), the Eastern College Athletic Conference (ECAC), and the New England Women's and Men's Athletic Conference (NEWMAC), which includes Babson College, Massachusetts Institute of Technology, Mount Holyoke College, Smith College, Springfield College, United States Coast Guard Academy, Wellesley College, Wheaton College and WPI. Clark lacrosse participates in the Pilgrim League, which consists of Babson, Lasell, MIT, Massachusetts Maritime, Norwich, Springfield, and Wheaton.

Men's varsity sports include baseball, basketball, cross country, lacrosse, rowing, soccer, swimming and diving, and tennis. The women's varsity sports include basketball, cross country, field hockey, rowing, soccer, softball, swimming and diving, tennis, and volleyball. For more information view the athletics Web pages at [www.clarku.edu/athletics.cfm](http://www.clarku.edu/athletics.cfm).



# Graduate Program and Research Institutes



Founded in 1887 as the first all-graduate school in America, Clark has continued to offer outstanding master's and doctoral degree programs in the context of an intimate university. Over the years, Clark's graduate school has been at the center of major research breakthroughs in disciplines as diverse as physics, geography and psychology.

Clark offers graduate programs leading to doctoral and master's degrees. Admission to Clark's graduate programs is open to holders of the bachelor's degree or its equivalent, and is determined on a competitive basis. All programs are administered by the Graduate Board. Completion of a master's degree program generally requires one or two years of study, and completion of the Ph.D. requires at least four years of study, although requirements vary across departments.

Doctor of philosophy degrees are offered in biology, chemistry, economics, geography, history, physics and psychology. Master of arts degrees are offered in community planning and development, education, English, environmental science and policy, geographical information science, international development and social change, and teaching. The master of business administration and master of science in finance are offered by the Graduate School of Management. The College of Professional and Continuing Education offers the master of public administration, master of science in professional communication and, master of science in information technology.

There is a wide variety of financial support available for incoming graduate students. Most departments offer teaching assistantships, fellowships and research assistantships. Often these come with a stipend as well as tuition grants. Some specific examples of fellowship awards are listed at the end of this section.

## Inquiries and Admission to Graduate School Programs

Inquiries from both U.S. and international students concerning specific programs of graduate and postdoctoral work should be addressed to the chair of the department or program concerned.

Admission to the graduate school may be granted only by the dean of graduate studies and research, acting for the Graduate Board on the recommendation of a department or program of the University. Formal notification is by official letter from the graduate dean.

Applicants should communicate with the appropriate department or program head. The applicant will be provided with an application form, which, accompanied by a \$50 application fee, should be returned to the department or program. In addition, the applicant should arrange to forward an official transcript of all undergraduate and any subsequent academic work as well as three letters of recommendation from persons who are competent to judge qualifications for graduate study.

Department or program heads may request the submission of additional material, and most require a record of attainment in the Graduate Record Examination given by the Educational Testing Service, Princeton, N.J. All applicants are urged to submit their scores on the Graduate Record Examination verbal, quantitative and advanced tests. Applicants to the Graduate School of Management programs are required to take GMAT rather than GRE examinations.

In addition to an application and \$50 fee, foreign students should provide a certified English translation of official transcripts, evidence of English proficiency (TOEFL) or International English Language Testing System (IELTS), at least three letters of recommendation, and a statement concerning their financial resources or agency support.

Application deadlines vary by department. Please contact the department or program of interest for the date.

Admission to the Graduate School is valid for a specified time only and lapses after that period. If a student is admitted while still a candidate for a degree from another institution, an updated transcript noting the conferring of that degree must be sent directly to the department or program of interest.

Part-time graduate study is possible in some departments. Admission as a special graduate student (nondegree candidate) is a simple enrollment process handled through the Registrar's Office.

## Master of Arts

Master of arts degrees are offered in the fields of community planning and development, education, English, environmental science and policy, geographic information sciences for development and environment, international development and social change and teaching.

**Residency:** An academic year (generally eight course units) of study in residence is a minimum requirement for a master's degree. Individual departments or programs may require longer periods of residency.

**Foreign Language:** Language or other special requirements are included in the department listings in this catalog.

**Course and Examination Requirements:** Each student must complete at least eight course units in a program approved by the department. One course may be a research course devoted to the preparation of the thesis. Credit for a maximum of two course units at another institution may be approved by the dean of graduate studies and research upon recommendation of the department.

**Thesis:** The thesis is written on a topic in the field of the student's special interest under the supervision of a member of the department and in a style, length and format that is appropriate to the problem being researched. A Formatting Guide for theses is available online at [www.clarku.edu/graduate](http://www.clarku.edu/graduate).

**Graduation Fee:** The fee for the master of arts degree is \$100. This covers the cost of the diploma and binding of the library copy. It is payable when the thesis is deposited with the format adviser. Students who do not write a thesis must pay this fee no later than the date on which theses are due to the University format adviser.

**Nonresident Students:** Students who have completed all their in-class course work and are finishing their degree requirements off campus must continue to register each semester until graduation as nonresident students. The nonresident student status fee is \$200 each semester for three years.

## Postgraduate Programs in COPACE

Through the College of Professional and Continuing Education (COPACE), Clark offers the master of public administration (M.P.A.), master of science in professional communication (M.S.P.C.) and master of science in information technology (M.S.I.T.).

The M.P.A. program is designed to strengthen and advance the managerial and analytical skills of mid-career managers and executives in public organizations and nonprofit institutions. The M.S.P.C. is a comprehensive, practical program designed to enhance communica-



tions skills and managerial techniques through courses designed specifically for mid-career professionals. The M.S.I.T. is designed to prepare professionals to take a holistic approach; think critically about enterprise objectives; learn the strengths and weaknesses of each technology and how they interface; and envision the totality of e-based systems. For further information, contact the College of Professional and Continuing Education.

### **Certificate of Advanced Graduate Study (CAGS)**

Through COPACE, Clark offers a Certificate of Advanced Graduate Study (CAGS) in Interdisciplinary Studies, designed for teachers, administrators and other professionals. The program is open to those already holding a master's degree. Although increased specialization in a student's particular area is possible through the chosen concentration track, the Clark Interdisciplinary Studies CAGS, unlike traditional CAGS offered elsewhere, attempts to foster breadth beyond a discipline. Courses are chosen from several disciplines; the student's focus is interdisciplinary, incorporating and transcending established domains of study.

### **Master of Business Administration/ Master of Science in Finance**

The accredited Clark University Graduate School of Management offers programs leading to the master of business administration (M.B.A.) and the master of science in finance (M.S.F.).

### **Doctoral Programs**

Doctor of philosophy degrees are offered in biology, chemistry, economics, geography, history, physics and psychology. Only well-qualified candidates with proven ability in their special fields of study will be encouraged to proceed to the degree of doctor of philosophy.

**Residence:** The minimum requirement is one year of full-time study (eight course units) beyond the M.A. or its equivalent in part-time work, in residence. If the master of arts has been earned at Clark, this requirement is in addition to the residence requirement for that degree.

**Foreign Language:** Each graduate department sets its own language or related requirements as the student's field of research may demand and must report such requirements in each case to the dean of graduate studies and research. If a language is required, either a testing service or on-campus tests are employed at the discretion of the department.

**Preliminary Examination:** Upon completion of preparation in the fields of study, a prospective candidate takes a preliminary examination set by the major department. This examination may be written or oral, or a combination of both. The chair of the department may invite other scholars from within or outside the University to participate in the examination.

**Dissertation:** A dissertation, which is expected to make an original contribution to a specialized field of knowledge, is required of each candidate. The dissertation, approved by the chief instructor or dissertation committee, is presented to the examining committee at the final oral examination. An abstract of the dissertation, not exceeding 350 words, is approved by the dissertation advisers. Four weeks before the degree is to be conferred, a presentation-quality copy of the dissertation, together with two official title pages, an academic history and an abstract must be delivered to the University format adviser. At the same time, one or more copies of the dissertation and of the abstract may be required by the major department. The title pages and academic history forms can be obtained online. The presentation-quality copy of

the dissertation must be computer printed as prescribed in the format guide located at [www.clarku.edu/graduate/current/formattingguides.cfm](http://www.clarku.edu/graduate/current/formattingguides.cfm)

The dissertation becomes part of the permanent collection in the University library. A microfilm copy of each dissertation is made by Proquest of Ann Arbor, Michigan, and is available for duplication on request to that company. The abstract is printed in Dissertation Abstracts International.

Articles published in referred journals may be accepted in lieu of a dissertation with the approval of the department and the graduate dean.

**Graduation/Diploma Fee:** The fee for the doctor of philosophy degree is \$150. It covers the cost of the diploma, hood, publication of the abstract in Dissertation Abstracts International, and binding of the library copy of the dissertation. It is payable when the dissertation is deposited with the University format adviser.

**Nonresident Students:** Students who have completed all their in-class course work and are finishing their degree requirements off campus must continue to register each semester until graduation as nonresident students. The nonresident student status fee is \$200 each semester for three years.

### **Graduate Grading Policies**

The grades of A and B (with "+" and "-") are acceptable for graduate credit; anything lower than a B- does not count for graduate credit. A Pass/Fail grading option is possible, where P (pass) signifies that the student has performed at a B- or above. Incompletes are awarded at the discretion of the instructor for a period not exceeding one year.

### **Graduate Housing**

A limited number of on-campus housing spaces are available through the Residential Life and Housing office. Incoming students have priority for this housing. Further details may be obtained from the Residential Life and Housing office or from academic departments.

Off-campus rooms and apartments for both men and women are available in the immediate area of the University. A limited listing of current housing opportunities is compiled by the Residential Life and Housing office. Students without prior arrangement for University-owned housing are urged to arrive before registration to seek suitable housing in the area.

For information on meal plans, health insurance and health services, please refer to the sections on Facilities and Student Resources.

### **Graduate Tuition and Other Charges for the 2008-2009 Academic Year**

#### **Full-time Graduate Students:**

Tuition: \$33,900 per academic year (or \$16,950 per semester)

In departments that define a full load as four courses per semester, the per-course charge is \$4,237.50. The per-course charge varies in some departments according to their specific definition of a full program. Students should contact their department chairs to find out which scale applies.

#### **Part-time Graduate Students:**

Tuition is charged on a per-course basis according to the scale used in the student's department (generally \$4,237.50 per course).

#### **Special Graduate Students (nondegree candidates):**

Tuition: \$4,237.50 per course



**Tuition and fees differ in the following programs:**

- Master of Business Administration
- Master of Science in Finance (Contact the Graduate School of Management for further details.)
- Master of Public Administration
- Master of Science in Professional Communication
- Master of Science in Information Technology (Contact the College of Professional and Continuing Education for further details.)
- Master of Arts in Teaching
- Master of Arts in Urban Education and Teacher Research

**Other Fees**

Graduation Fee—payable at the time the thesis or dissertation is deposited with the Office of the Graduate School.

Master's degrees	.....\$100
Doctoral degrees	.....\$150

Students who do not write a thesis or dissertation, including those receiving the degree through an alternative program, must pay this fee no later than the date on which theses are due to the University format adviser (generally, April 1).

Nonresident fee	.....\$200
Payable July 24 and Dec. 15: \$200 each semester for first three years.	

**Loan Deferment**

Only students enrolled on at least a half-time basis are eligible for student deferment status on college loans. Nonresident graduate students on a half-time basis are limited to two years of student deferment status.

**Graduate Scholarships, Fellowships and Assistantships**

Graduate fellowships and scholarships are provided for well-qualified students by the University from endowed funds and from other sources. Financial aid to graduate students also is available in the form of grants from a number of special funds and, in some departments, from sponsored research grants. Students who receive awards must obtain permission from the department before accepting employment. Application for a scholarship or fellowship to begin in September should be made before Feb. 15 to the chair of the department or director of the program in which the applicant expects to do major work. Late applications, after endorsement by the department, go to the dean of graduate studies and research for final approval.

**Research Fellowships**

These fellowships may be awarded to graduate students who have fulfilled their residence requirements and who are pursuing a full-time doctoral program on campus.

**Teaching Assistantships**

Teaching assistantships, generally only offered to doctoral students, consist of a variety of duties according to the needs of the department. Responsibilities include conducting discussion sessions, supervising laboratory sections, holding tutorial sessions and grading papers and projects. Assistantships typically involve a commitment of approximately half time (an average of 17-1/2 hours a week). A tuition-remission scholarship or fellowship accompanies this award. Additional support up to a 12-month stipend is available in some departments.

**Assistantships**

Assistantships are available in several departments. Assistantships involve a variety of services, including research with appropriate stipends, and usually provide the student with experience that will be useful in later professional work.

**Graduate Fellowship, Scholarship, and Department Funds**

Stipends for fellowships and scholarships are provided by endowed funds. For further information about these funds, contact the Graduate School Office.

**Research Centers**

**Strassler Family Center for Holocaust and Genocide Studies**

The Strassler Family Center for Holocaust and Genocide Studies provides vital national and international leadership in educating future generations of scholars. The center, in conjunction with Clark's History Department, offers North America's first Ph.D. program specifically in Holocaust history and genocide studies. Clark also offers the richest interdisciplinary undergraduate program in Holocaust and genocide studies in the country. It includes courses in history, literature, psychology, government and sociology. A special feature of this program is the May Term in Prague and Terezin in the Czech Republic and Auschwitz, Poland, which, every other year, brings a group of Clark undergraduates to Central Europe for an intensive three-week course that includes visits to key Holocaust historical sites. Clark is the first college or university anywhere to have two occupied fully endowed, full-time tenured professorships in Holocaust history, as well as a professorship dedicated to the study of the Armenian genocide.

**George Perkins Marsh Institute**

The George Perkins Marsh Institute was founded in 1991 to promote and conduct collaborative and interdisciplinary research on human-environment relationships that cover a wide range of research themes including risks and hazards, the human dimensions of global environmental change, resource and environmental policy, industrialization and globalization, and the development and application of Geographic Information Science across multiple disciplines.

The institute fosters team-based research that engages graduate students and research faculty in problem formulation and resolution. By galvanizing research of this kind within Clark University, its surrounding community and beyond, the institute affords its research faculty and students the opportunity to engage in a scale, scope and quality of research that would not be possible otherwise, thus helping to extend Clark's research activities around the world.

The institute is comprised of four centers: CANTED, which contains the Community-Based Development Program (CCBD) and the Community-Based Hazard Management Program (CBHM); Clark Labs; the Greening of Industry Network; and the newly formed Center for Risk and Security (CRS).

- Founded in 1978, the **Center for Technology, Environment and Development (CANTED)** is internationally recognized as one of the oldest and most prominent centers for the study of natural and technological hazards in the United States. Interdisciplinary research has always been CANTED's forte, ranging from theoretical work on hazard analysis, hazard taxonomies, vulnerability, environmental equity, comparative risk assessment and risk perception to more applied work on risk communication, radioactive-waste management, public participation, corporate risk management, cancer and noncancer health risks, occupational risks, hazardous-waste



transportation, and emergency planning. CENTED researchers have also maintained an interest in practical issues relating to the University and the surrounding Worcester community.

CENTED continues its traditional work on risks and hazards with projects funded by various agencies, such as the EPA, NIEHS and the Department of Energy (DOE), that look at the effect of exposure to toxic substances on birth weight, developing methodologies for assessing uncertainty and variability of human response to exposures to hazardous substances and vulnerability studies.

- **The Clark Labs for Cartographic Technologies and Geographic Analysis (Clark Labs/IDRISI Project)** is dedicated to the research and development of geospatial technologies to address the needs of effective and responsible decision making for environmental management, sustainable resource development and equitable resource allocation. Clark Labs is best known for its flagship product, IDRISI GIS and Image Processing software, which it continues to develop and distribute. Since its inception in 1987, over 35,000 organizations and individuals have been licensed to use the software in more than 175 countries. IDRISI provides unprecedented tools for multicriteria and multiobjective decision making, environmental change and time series analysis, land-cover change, change prediction and analysis of ecological implications dynamic modeling, risk and uncertainty management, and soft classification of remotely sensed imagery. Clark Labs also engages in limited applications research. Projects have ranged from the detection of diseased trees using hyperspectral imagery and the predictive modeling of invasive species using neural networks, to the spatial and temporal analysis of climate cycles (El Nino/La Nina), to vulnerability in contexts as varied as landslides and droughts. Clark Labs has also had a strong involvement in the transfer of GIS technology, particularly in the context of the developing world.
- The Marsh Institute hosts the America's office **Greening of Industry Network (GIN)**. GIN is an international organization dedicated to accelerating progress toward a sustainable society. The America's office works in cooperation with two other GIN programs, GIN-Asia at Chulalongkorn University in Thailand, and GIN-Europe at the University of Twente in the Netherlands. Network members work in many fields and come from many countries. Founded in 1991, GIN members work to develop knowledge and transform practice to accelerate progress toward a sustainable society, and seek to create new concepts and a new language that will make it possible to extend our horizons and communicate across disciplines, nations and sectors.
- The newly formed, **Center for Risk and Security (CRS)** conducts in-depth studies of homeland security issues using a risk-analysis perspective. The center's broad range of security issues includes terrorism, disaster management, law and human rights, resource allocation, critical infrastructure, social dimensions of risk, and international trade security. CRS's purpose is to adapt and develop risk and decision methods for analyzing these issues, conduct critical reviews of existing security plans, and assist private and governmental entities in planning and policy development. The domain of effort for the center includes expanding the scope of risk assessments to include security issues, developing methods to evaluate the trade-offs inherent in decisions about security, examining human-response aspects of planning and design of security programs, and assuring that democratic values and institutions are utilized in security planning.

## Majors, Minors and Special Programs



### Bookmark it! [www.clarku.edu/catalog](http://www.clarku.edu/catalog)

For the most up-to-date academic catalog information, visit Clark's online catalog at [www.clarku.edu/catalog](http://www.clarku.edu/catalog). This user-friendly online version of the academic catalog is updated before each registration period with the latest information and descriptions of new courses. Plus, you can easily link from the online catalog to faculty bios, program Web pages and other expanded information.

### Helpful Information

**Undergraduate-Level Courses** are numbered 001-299.

**Graduate-Level Courses** are numbered 300 and above.

**Course Descriptions** are listed in the course's home program/department. The following key lists Clark's course prefix codes (letter codes) and the corresponding home program/department that you should reference for the course description. For example, the course description for FREN101 Elementary French can be found in Foreign Languages and Literatures.

### Course Code Prefixes and corresponding home program/department

<b>ACCT</b>	Management
<b>ARTH</b>	Art History and Criticism
<b>ARTS</b>	Studio Art
<b>AS</b>	Asian Studies
<b>ASTR</b>	Physics
<b>BCMB</b>	Biochemistry and Molecular Biology
<b>BINF</b>	Bioinformatics
<b>BIOL</b>	Biology
<b>CHEM</b>	Chemistry
<b>CHIN</b>	Foreign Languages and Literatures (Chinese)
<b>CLAS</b>	Ancient Civilization
<b>CMLT</b>	Comparative Literature
<b>COM</b>	Management
<b>COMM</b>	Communication and Culture
<b>CSCI</b>	Computer Science
<b>ECON</b>	Economics
<b>EDUC</b>	Education
<b>EN</b>	Environmental Science
<b>ENG</b>	English
<b>ENT</b>	Innovation and Entrepreneurship
<b>FIN</b>	Management
<b>FREN</b>	Foreign Languages and Literatures (French)
<b>GEOG</b>	Geography
<b>GERM</b>	Foreign Languages and Literatures (German)
<b>GES</b>	Geography (Global Environmental Science)
<b>GOVT</b>	Government and International Relations
<b>HCM</b>	Management
<b>HEBR</b>	Foreign Languages and Literatures (Hebrew)
<b>HIST</b>	History



<b>ID</b>	International Development and Social Change, IDCE
<b>IDCE</b>	International Development, Community and Environment (IDCE)
<b>IDND</b>	Interdepartment; No department
<b>JAPN</b>	Foreign Languages and Literatures (Japanese)
<b>JS</b>	Jewish Studies
<b>LAS</b>	Law and Society
<b>LAT</b>	Foreign Languages and Literatures (Latin)
<b>MKT</b>	Management
<b>MATH</b>	Mathematics
<b>MGMT</b>	Management
<b>MIS</b>	Management
<b>MUSC</b>	Music
<b>OM</b>	Management
<b>PHIL</b>	Philosophy
<b>PHYS</b>	Physics
<b>PSTD</b>	Peace Studies
<b>PSYC</b>	Psychology
<b>RER</b>	Race and Ethnic Relations
<b>SCRN</b>	Screen Studies
<b>SOC</b>	Sociology
<b>SPAN</b>	Foreign Languages and Literatures (Spanish)
<b>STAT</b>	Management
<b>TA</b>	Theater Arts
<b>UDSC</b>	Urban Development and Social Change
<b>WS</b>	Women's and Gender Studies

## ANCIENT CIVILIZATION

### Program Faculty

Paul Burke, Ph.D. - *Chair*

Everett Fox, Ph.D.

Rhys Townsend, Ph.D.

### Program Overview

The program in ancient civilization consists principally of courses in art history, classics, Jewish studies and philosophy. This interdisciplinary program covers the entire spectrum of ancient Mediterranean culture including Greek, Hebrew and Latin languages. By combining art history, Jewish studies and philosophy with what has been traditionally identified as classics (Greek and Latin language and literature), the Clark program in ancient civilization presents established disciplines in a stimulating and original configuration.

### Undergraduate Requirements

The purpose of the major is to supply students with a sound knowledge of the ancient Greco-Roman and Judaeo-Christian roots of Western civilization. Majors are expected to acquire a working knowledge of at least one of the principal languages of the ancient Mediterranean (Classical Greek, Hebrew or Latin); this ensures direct access to the culture, literature, philosophy and history of the ancient world. Majors are also eligible to apply for admission to the Intercollegiate Center for Classical Studies in Rome, where they can spend a semester studying classical literature and archaeology.

To graduate as an ancient civilization major, a student must earn a grade of C–or better in at least 10 courses in ancient civilization.

These courses must include:

1. At least two courses, from different departments, from among this group of foundation courses:  
ARTH110 Ancient Greek Art  
CLAS111 Roman Art and Architecture  
CLAS121 Introduction to Greek Culture  
HIST174 The Jewish Experience  
PHIL141 History of Ancient Greek Philosophy
2. At least one semester course at or above the intermediate level (language 103) in Greek, Hebrew or Latin.
3. A one-semester senior seminar, to be taken preferably during the second semester of the senior year, including a major research paper, arranged in consultation with at least two members of the program faculty by the end of the junior year.

### Ancient Civilization Minor

An interdepartmental minor in ancient civilization consists of a total of six courses listed below, or other courses approved for the minor by program faculty. These courses must include:

1. At least two courses, from different departments, from the group of foundation courses listed under “Major Requirements.”
2. At least two 200-level courses.

Students who minor in ancient civilization are strongly encouraged (but are not required) to study Latin, Greek or Hebrew for their remaining two courses.

### Courses

#### ARTH106 INTRODUCTION TO ARCHAEOLOGY

See Art History 106.

#### ARTH109 CLASSICAL MYTH AND THE GREEK

See Art History 109.

#### ARTH110 ANCIENT GREEK ART

See Art History 110.

#### ARTH114 ANCIENT CITIES AND SANCTUARIES

See Art History 114.

#### ARTH215 THE TEMPLE BUILDERS: ARCHITECTURE IN ANCIENT GREECE

See Art History 215.

#### ARTH219 SEMINAR IN ANCIENT ART: PORTRAITS AND REPRESENTATION IN THE ANCIENT WORLD

See Art History 219.

#### CLAS050 JESUS AND HISTORY/FIRST-YEAR SEMINAR

Studies the many aspects of the “historical Jesus” issue. What can be known with certainty about Jesus of Nazareth? What do we know with reasonable historical confidence? How does one evaluate, as a historian, ancient texts (the canonical and noncanonical Gospels, among others), which supply inconsistent accounts and which make religious claims not subject to historical analysis? The course also focuses on the historical context of Jesus, as a first-century Palestinian Jew under Roman authority. Open to first-year students only. Fulfills the Historical Perspective requirement.



**CLAS111 ROMAN ART AND ARCHITECTURE/LECTURE, DISCUSSIONS**

Surveys artistic and architectural accomplishments of ancient Rome and the Roman Empire, beginning with the origins of Rome in Bronze Age central Italy. Studies Roman relations with Etruscans, Greeks and other non-Latin-speaking peoples as manifested in Roman art and architecture. Examines effects of Judaeo-Christian values on the formerly pagan Empire, appearance of a Christian Roman government and development of distinctively Christian forms of Roman art and architecture. Mr. Burke/Offered periodically

**CLAS124 INTRODUCTION TO CLASSICAL MYTHOLOGY/LECTURE, DISCUSSION**

Studies English translations of ancient Near Eastern, Greek and Roman literary text (along with some modern ones) to understand the function of myth in Greco-Roman antiquity as a vehicle for artistic communication and social commentary. Emphasizes influence of ancient mythology on later European culture, especially literature and art. Includes slide illustrations. Mr. Burke/Offered every other year

**CLAS150 JERUSALEM IN HISTORY AND IMAGINATION/LECTURE, DISCUSSION**

See Jewish Studies 150.

**CLAS222 JESUS, HISTORY AND THE APOCALYPSE/LECTURE, DISCUSSION**

Studies the many aspects of the "historical Jesus" issue. What can be known with certainty about Jesus of Nazareth? What do we know with reasonable historical confidence? How does one evaluate, as a historian, ancient texts (the canonical and noncanonical Gospels, among others), which supply inconsistent accounts and which make religious claims not subject to historical analysis? The course also focuses on the historical context of Jesus, as a first-century Palestinian Jew under Roman authority. Mr. Burke/Offered every other year

**CLAS262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD**

A historical and cultural survey of the complex and tumultuous period between foundations of the Roman Empire and the sixth century A.D., when medieval culture was established in Europe. Studies the struggle between pagan or classical modes of thought and Judaeo-Christian beliefs and values, and the assimilation of each in the other; and the tension within the Christian movement between spiritual and practical concerns as the new religion came to dominate Western culture. Mr. Burke/Offered every other year

**CLAS267 RELIGIOUS EXPERIENCE IN THE ANCIENT WORLD/LECTURE, DISCUSSION**

Studies religious experience available to people of the ancient Mediterranean from approximately the time of Homer to the official acceptance of Christianity by Roman Imperial government. Includes: nature of polytheist gods, prophecy and oracles, conversion and spread of religious belief, Jewish and Christian monotheism, evil in ancient religious thought and the rise of Christianity. Mr. Burke/Offered every other year

**GRK101 INTRODUCTORY GREEK I, II/LECTURE, DISCUSSION**

See Greek 101.

**GRK299 SUPERVISED READING IN PHILOSOPHICAL GREEK**

See Greek 299.

**LAT101 INTRODUCTORY LATIN**

See Latin 101.

**LAT103 INTERMEDIATE LATIN**

See Latin 103.

**LAT299 SUPERVISED READING IN PHILOSOPHICAL LATIN**

See Latin 299.

**BIOCHEMISTRY AND MOLECULAR BIOLOGY****Program Faculty**

Donald Crampton, Ph.D.

Frederick Greenaway, Ph.D.

David Hibbett, Ph.D.

Shuanghong Huo, Ph.D.

Denis Larochelle, Ph.D.

Noel Lazo, Ph.D.

Deborah Robertson, Ph.D.

Justin Thackeray, Ph.D.

David Thurlow, Ph.D.

Heather Wiatrowski, Ph.D.

**Emeriti Faculty**

John Brink, Ph.D.

Thomas Leonard, Ph.D.

Timothy Lyerla, Ph.D.

**Program Overview**

The biochemistry and molecular biology program offers an interdisciplinary major that draws on the faculty and course resources of the departments of biology and chemistry. Designed to provide students with an in-depth exploration of an area of science that is perhaps the most exciting and actively growing of any today, the program is suitable for students who want to pursue graduate studies in the area; enter medical school with a strong background in basic science; or take laboratory or other science-related positions after graduation. Those wishing to major in biochemistry and molecular biology must select an adviser within the program and file a plan of study with the program director.

**Undergraduate Requirements**

Students first obtain a solid grounding in biology, chemistry, physics, and calculus and then take biochemistry, a yearlong course sequence that covers our current understanding of the field. After that, there is a choice between two tracks, or alternative ways to complete the major, depending on the individual's interests. Students must also demonstrate competence in communicating biochemical concepts (e.g., through reports based on research in the scientific literature, Academic Spree Day presentations, Directed Study papers, Honors thesis, or publications), and take the American Chemical Society standardized exam (either as part of a course requirement, or as a separate assessment of their understanding of the body of knowledge in biochemistry and molecular biology).

The core curriculum consists of the following required courses:

- Introduction to Calculus (MATH120 and 121 or 124 and 125)
- Introduction to Physics (PHYS110 and 111 or 120 and 121)
- Introductory Chemistry (CHEM101 and 102)
- Introduction to Biology (BIOL101 and 102)
- Genetics (BIOL118)
- Cell Biology (BIOL137) or Microbiology (BIOL109)
- Organic Chemistry (CHEM131 and 132 or 134)
- Biophysical Chemistry (BCMB264)
- Biochemistry I and II (BCMB271 and 272)



The student will also complete one of the following two groups of courses, emphasizing either biochemistry or molecular biology:

Courses required for the biochemistry track:

- Bioanalytical Chemistry (BCMB244)
- Protein Chemistry (BCMB275)

Courses required for the molecular biology track:

- Molecular Genetics (BCMB228)
- Recombinant DNA (BCMB231)

Students must also complete two additional courses related to biochemistry and molecular biology, which do not satisfy requirements for other majors or transcript designations. This requirement may be satisfied with any of the program offerings, a directed research course, any biology or chemistry course in the list above (and not already used to fulfill a requirement), or other biology or chemistry courses approved by the adviser.

## Honors Program

A student interested in the honors program should contact the program faculty member with whom the student would like to do research and then apply in writing to the program director for admission. A "B" average is required. In addition to the program requirements, honors candidates must:

- Carry out a research project under the supervision of a faculty member in the biochemistry and molecular biology program.
- Submit an honors thesis or publication based on the research project.
- Present the research results in a public seminar.

Students are encouraged to begin their research in the summer following the junior year, if not earlier.

## Biochemistry and Molecular Biology Minor

The requirements for a minor in biochemistry and molecular biology are:

- BCMB271 Biochemistry I and BCMB272 Biochemistry II
- Two additional related courses, neither of which may be used to satisfy requirements for other majors, minors or concentrations.

## Courses

### BCMB109 MICROBIOLOGY/LECTURE, LABORATORY

See Biology 109.

### BCMB228 MOLECULAR GENETICS/LECTURE, SEMINAR

Explores recent discoveries in the molecular genetics of prokaryotes and eukaryotes, with emphasis on new findings related to catalytic activities of RNA. Topics include: protein synthesis, RNA transcription, gene regulation, RNA splicing, catalytic RNA and origins of living systems. Intended primarily for seniors and graduate students. Prerequisite: BCMB271 or BIOL118 or permission of instructor. Mr. Thurlow/Offered every year

### BCMB231 RECOMBINANT DNA/LECTURE, LABORATORY

See Biology 231.

### BCMB244 BIOANALYTICAL CHEMISTRY/LECTURE, LABORATORY

Presents both theoretical and practical aspects of quantitative analysis as they apply to biological macromolecules—proteins and nucleic acids. Topics include statistical procedures for evaluating analytical data; spectroscopic and electrochemical methods of analysis; chromato-

graphic and electrophoretic methods; and kinetic methods of analysis. A significant portion of the laboratory phase of the course will be devoted to carrying out a group research project, such as the characterization of a protein after site-directed mutagenesis. Prerequisite: BCMB271. Mr. Crampton/Offered every other year

### BCMB252 BIOINORGANIC CHEMISTRY/LECTURE

Discusses the chemistry of metals in biological systems and models of these systems. The introductory material introduces general principles and theories of biochemistry and inorganic chemistry, as well as metal ion and drug transport in biological systems. This is followed by an introduction to physical techniques used in studying metalloproteins. The major part of the course discusses the application of these principles and methods to a wide range of metallobiological systems. Prerequisite: permission of the instructor. Mr. Greenaway/Offered periodically

### BCMB264 BIOPHYSICAL CHEMISTRY/LECTURE, LABORATORY

Emphasizes the physical chemistry of biological macromolecules—proteins and nucleic acids. Covers the basic laws of thermodynamics, molecular thermodynamics (including aspects of modeling macromolecular structure, molecular mechanics and molecular dynamics simulations), statistical thermodynamics, x-ray and NMR structure determination, light scattering by macromolecules, kinetics quantum mechanics and spectroscopy, and solution behavior of macromolecules. The laboratory sessions are split between "wet" macromolecular chemistry and computational projects. Prerequisite: BCMB271, MATH121 or MATH125, or permission of instructor. Mr. Lazo/Offered every other year

### BCMB271 BIOCHEMISTRY I/LECTURE, LABORATORY

A comprehensive survey of biochemistry and molecular biology, including protein structure, enzyme kinetics, membrane structure, DNA structure, replication, transcription and translation. The laboratory introduces basic techniques including safe use of radioisotopes, isolation of proteins, purification of enzymes, enzyme kinetics, gel electrophoresis, column chromatography and DNA isolation and characterization. Prerequisite: CHEM101/102 or 103; BIOL100, 101, or 103, and 102; and CHEM131 (or permission). Mr. Crampton, Mr. Thurlow/Offered every year

### BCMB272 BIOCHEMISTRY II/LECTURE

A comprehensive survey of the carbohydrates, energy metabolism and metabolic biochemical pathways. Topics include glycolysis, TCA cycle, oxidative and photosynthetic phosphorylation, catabolism and anabolism. The discussion section reviews articles from the literature on recombinant DNA, signal transduction and other current topics. Prerequisite: CHEM132 or CHEM134 and BCMB271. Mr. Thurlow/Offered every year

### BCMB273 PRINCIPLES OF MOLECULAR MODELING/LECTURE

See Chemistry 273.

### BCMB275 PROTEIN CHEMISTRY/LECTURE

Presents an in-depth view of protein structures and molecular properties, and discussions of how structure and properties are inextricably linked to biological function. Topics discussed include: chemical properties of polypeptides, biosynthesis of proteins, posttranslational modifications, evolutionary and genetic origins of protein sequences, physical interactions that determine the properties of proteins, the folded conformations of proteins, proteins in solution and in membranes,

interaction of proteins with other molecules, enzyme catalysis and protein degradation. This course has a computational component which will provide students with hands-on learning experience. Prerequisite: BCMB271 or permission of instructor. Mr. Crampton/Offered every other year

#### **BCMB279 COMPUTER BIOCHEMISTRY/LECTURE**

See Chemistry 279.

#### **BCMB297 HONORS**

Departmental honors in biochemistry and molecular biology requires laboratory research, a thesis and a seminar. Staff/Offered every semester

#### **BCMB298 INTERNSHIP**

Internships are arranged through the Career Services Office. Students may register under BCMB298 provided that the Clark internship supervisor is a member of the Biochemistry and Molecular Biology program. Staff/Offered every semester

#### **BCMB299 DIRECTED STUDY**

Individual investigations involving laboratory research under the direction of a professor or advanced readings in the scientific literature. Offered for variable credit. Prerequisite: permission of instructor. Staff/Offered every semester

## **BIOLOGY**

### **Program Faculty**

Susan Foster, Ph.D. - *Chair*

David Hibbett, Ph.D.

Linda Kennedy, Ph.D.

Denis Larochelle, Ph.D.

Todd Livdahl, Ph.D.

Deborah Robertson, Ph.D.

Justin Thackeray, Ph.D.

Heather Wiatrowski, Ph.D.

### **Adjunct Faculty**

Halina Brown, Ph.D.

Donald Crampton, Ph.D.

Frederick Greenaway, Ph.D.

Dominik Kulakowski, Ph.D.

Noel Lazo, Ph.D.

John Rogan, Ph.D.

David Thurlow, Ph.D.

### **Research Faculty**

John Baker, Ph.D.

### **Emeriti Faculty**

Vernon Ahmadjian, Ph.D.

John Brink, Ph.D.

Joseph Curtis, Ph.D.

H. William Johansen, Ph.D.

Thomas Leonard, Ph.D.

Timothy Lyerla, Ph.D.

John Reynolds, Ph.D.

## **Program Overview**

The department offers courses that prepare students for work and advanced study in the biological and biomedical sciences; provides support for other programs within the University that require students to obtain a background in one or more subfields of biology; and meets the needs of non-science majors who wish to integrate the perspectives of the science of biology into a liberal-arts curriculum. The major in biology is especially suitable for students who intend to go on to professional schools in the health sciences or graduate work in a variety of subfields of the biological sciences.

The department provides a curriculum for students wishing to optimize their breadth of exposure to the field as a whole. The department encourages students to identify an area to emphasize within biology and to plan a sequence of courses that will provide depth of exposure to the topics within that area, including a research experience, if possible.

The department offers two general curricula: one in cell and molecular biology and one in ecology and evolution. Prospective majors are urged to consult with an adviser selected from the department's faculty, especially to take advantage of opportunities to participate in ongoing research in the honors program, specialized research courses, and internships.

Please note that the two-semester sequence, Introduction to Biology (BIOL100,101,or 103 and 102) is a prerequisite for all other courses in biology that will be used to meet the requirements for the major.

## **Undergraduate Requirements**

The Biology Department's course offerings provide students with the flexibility to become broadly trained or to focus in a particular area of the biological sciences. The requirements and general recommendations for the biology major are appropriate for students seeking careers in health-related, research-related, education or academic fields. During their four years at Clark, students work closely with their academic advisors to select courses that best fit their overall academic interests and career goals.

### **Requirements for all biology majors:**

- 10 courses in biology, including BIOL100,101, or 103) and BIOL102 (see below)
- Two courses in chemistry (CHEM101and CHEM102)
- Courses in mathematics to include a year of calculus MATH120 and 121, or MATH124 and 125, or one semester of calculus combined with BIOL106 Quantitative Methods in Biology; if Quantitative Methods in Biology is used to meet this requirement, it will not count toward the total of 10 required biology courses.
- Two additional courses in chemistry, physics, mathematics at 120 level or higher), computer science, geology, GIS, physical geography. Courses applied to the major must be at the 100 level or above.
- Science and mathematics courses offered to meet the major requirements may not be taken with a pass option.

At least two of the 10 required biology courses must be at the 200 level or above, and no courses below the 100 level may be used to satisfy major requirements.



### Additional Requirements for the Generalized Biology Major

Of the eight courses beyond BIOL100,101, or 103 and BIOL102, one course must be completed in each of the following three areas:

1. Molecular and Cell Biology, including BIOL118 Genetics, and BIOL137 Cell Biology
2. Organismal Diversity, including BIOL109 Microbiology, BIOL110 Botanical Diversity, BIOL112 Comparative Vertebrate Anatomy, BIOL140 Biology of the Brain, and BIOL180 Introduction to Fungal Biology
3. Ecology and Evolution, including BIOL105 Evolution, BIOL114 Marine Biology, BIOL216 Ecology, and BIOL220 Population Biology

In selecting these courses, biology majors should (1) take at least one course that develops research techniques and approaches in one area of biology, (2) take at least one seminar course, and (3) conduct a capstone project in a non-classroom setting. This can be a directed study in a faculty research laboratory, an internship, or an off-campus summer research experience.

To guide students interested in Cell and Molecular Biology, Ecology and Evolution, and Prehealth Biology, recommended curricula are outlined below.

### Recommended Curriculum for Cell and Molecular Biology

For students who wish to prepare for graduate studies in medicine or cell and molecular biology, education, or employment in biomedical research, the eight courses beyond BIOL101 and BIOL102 should be structured as follows:

- BIOL137 Cell Biology and BIOL118 Genetics
- Two upper-level informational courses aimed at advancing understanding of cell and molecular processes, including CHEM228 Molecular Genetics, BIOL250 Immunology, BIOL221 Developmental Biology, BIOL234 Signal Transduction, BIOL238 Seminar in Cell Biology, and BIOL244 Biological Clocks.
- One course that develops research techniques: BIOL231 Recombinant DNA, BIOL219 Physiological Ecology of Marine Algae, BIOL229 Principles of Cell Culture, BIOL227 Somatic and Molecular Cell Genetics, BIOL254 Molecular Systematics and Evolution, BCMB271 Biochemistry, or BIOL299 Directed Study.
- A minimum of three elective courses in biology
- Capstone project: Students are urged to pursue course experiences that remove them from the traditional classroom setting. These may include directed study in faculty research laboratories, internships, or off-campus summer-research experiences.

Students should select these biology courses with the additional aim of completing courses in the three areas described above in the generalized biology major requirements. Students are encouraged to fulfill the additional science course requirement of the generalized major with Organic Chemistry and Physics.

### Recommended Curriculum in Ecology and Evolution

For students who wish to prepare for work or advanced studies in ecology or evolutionary biology, the eight biology courses beyond BIOL101 and 102 should be structured as follows:

- BIOL105 Evolution
- Two courses that are primarily informational in content, aimed at describing a wide variety of aspects of the natural environment or evolution, including BIOL109 Microbiology, BIOL110 Introduction to Plant Diversity, BIOL112 Vertebrate Morphology, BIOL114 Marine Biology, BIOL180 Introduction to Fungal Biology, BIOL242 Animal Behavior
- Two courses with an analytical or theoretical orientation, including BIOL118 Genetics, BIOL135 Paradox of Animal Sociality, BIOL216 Ecology, BIOL220 Population Biology, BIOL232 Landscape Ecology, BIOL254 Molecular Evolution
- One course that develops research techniques: BIOL201 Ecology of Atlantic Shores, BIOL224 Ecology of Disease Vectors, BIOL219 Physiological Ecology of Marine Algae, BIOL242 Animal Behavior
- One seminar course: BIOL217 Ecology of Infectious Diseases, BIOL222 Community Ecology, BIOL223 Topics in Marine Biology, BIOL243 Comparative Biology, BIOL246 Biology of Symbiosis, BIOL252 Seminar in Mycology
- Capstone project: Students are urged to pursue course experiences that remove them from the traditional classroom setting. These include directed study in faculty research laboratories, internships, and summer or semester-long field courses.

### Recommended Curriculum in Prehealth Biology

For more information, visit the Biology Web site at <http://www.clarku.edu/departments/biology/undergraduate/prehealth.cfm>

### Honors Program

Qualified, upper-division students majoring in Biology may choose to carry out independent research in the Honors Program, under the direction of a faculty member in the Department. Success in the program will result in notation on the student's diploma.

Prospective Honors candidates should apply in writing to the Chair of the Department for admission into the Honors Program by April 15 of their junior year.

The application should include:

1. a list of courses taken, and those the student plans to take, in the major and related fields,
2. the name of their prospective faculty advisor, and
3. a brief description of the proposed Honors project.

Requirements for the program are listed below:

- The candidate must maintain a "B" (3.0) average and grades of "B" or better in all biology courses during their junior and senior years.
- The candidate must complete Clark University and Biology major requirements.
- The candidate must work with a faculty advisor. Together they will select two other faculty members to serve on the student's advisory committee.
- The candidate must complete at least one semester each of Directed Research (BIOL 299) and Honors Research in Biology (BIOL 297), and the investigation carried out must be summarized in an acceptable thesis.

- The candidate must present his/her work in a public presentation and pass a comprehensive oral defense-of-thesis exam given by the advisory committee. This exam will test the student on the specific area of investigation and can also include general knowledge of biology. The candidate must provide each advisory committee member a near-final draft of the thesis one week before the scheduled comprehensive defense.
- The candidate must complete a final draft of the thesis to the satisfaction of the committee and may be awarded Honors, High Honors, or Highest Honors.
- The original and two copies of the completed thesis must be submitted to the department five weeks before Commencement.

## Biology Minor

The requirements for a minor in Biology are:

1. BIOL100, 101 or 103 and BIOL102 Introductory Biology
2. Four additional courses spanning at least two of the three subject categories set out in the Generalized Biology Major. A selection of appropriate courses in each designation is listed in the description of the major, but students are not restricted to selecting from this list. At least one of the four must be at the 200 level and none can be below the 100 level. All students wishing to complete a minor must select courses, receive approval from their biology faculty adviser and declare the minor by the end of the junior year, although earlier is recommended.

## Accelerated Degree Program

Biology offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

## Graduate Program

The department offers course work leading to the doctor of philosophy in biology. The department has two foci for graduate emphasis: molecular and cell biology or ecology and evolution.

Students applying for admission must demonstrate adequate preparation in the basic sciences, an overall undergraduate record of B– or better, and satisfactory scores on the Graduate Record Examination (and TOEFL for International Students). Tuition scholarships and research and teaching assistantships are available to qualified students. Further information can be obtained from the department or our Web site at [www.clarku.edu/departments/biology](http://www.clarku.edu/departments/biology)

## Courses

### BIOL040 BRAIN AND ENVIRONMENT/FIRST-YEAR SEMINAR

This seminar is a laboratory-focused course on how we use specialized systems in our brains to find out about our environment. The class as a group will conduct original research on unsolved problem in human sensory physiology: how we detect and identify a food substance as sweet. We will review the known anatomy and physiology of the brain system for taste and discuss how systems for seeing, hearing, smelling and touching are similar. Then we will consider recent research on the problem of sweet taste, work out the details of our experimental design, test a group of human subjects, and analyze and interpret the data. Each student will write a final paper reporting the research in the style of a scientific journal article. Enrollment is limited to 12 students. A high-school chemistry background is recommended. Fulfills the Science Perspective. Ms. Kennedy

### BIOL084 BIODIVERSITY/LECTURE, LABORATORY

Students will explore the diversity of life on earth and the mechanisms by which this diversity is thought to have been generated. The implications of loss of biodiversity will be considered, as well as the causes of biodiversity decline. Conservation issues will be addressed. Fulfills the Science Perspective. Not for biology majors. Staff/Offered alternate years

### BIOL100 INTRODUCTORY BIOLOGY/FIRST-YEAR RESEARCH SEMINAR IN FUNGAL MOLECULAR ECOLOGY

Biology 100 will be a first-year research-oriented course that combines lectures and discussions with a semester-long, team-driven research project. The class will be restricted to ten incoming students with strong backgrounds in Biology and will satisfy the requirement for BIOL 100 in the Biology Major. BIOL 100 will give first-year students an opportunity to pursue research in a small group setting in their first semester at Clark, and will simultaneously provide an introduction to the general topics treated in BIOL 100 and training in writing and study skills. The central theme of this course will be an investigation of the fungal symbionts of *Monotropa uniflora*, which is a locally abundant species of non-photosynthetic plants commonly known as Indian pipes. *Monotropa uniflora* steals carbohydrates from plants via fungal intermediates. We will collect plants in the field and identify their fungal partners using molecular tools. Permission of instructor. Mr. Hibbett/Offered every other year

### BIOL101 INTRODUCTION TO BIOLOGY I/LECTURE, LABORATORY

### BIOL102 INTRODUCTION TO BIOLOGY II/LECTURE, LABORATORY

This two-semester course sequence is designed with three goals in mind: (1) to provide students with an understanding of the unifying themes in modern biology, (2) to introduce students to the diversity of life forms at all levels of organization, and (3) to illustrate the methods and modes of scientific inquiry in the biological sciences. Students are introduced to principles of evolution, and genetics during the fall semester and cell biology, organismal diversity, and ecology during the spring semester. Both semesters must be completed before a student can enroll in advanced courses offered to satisfy the requirements of the biology major. Qualified students must obtain approval from the chair of the department to have this requirement waived. Fulfills the Science Perspective. Ms. Foster and Mr. Thackeray (BIOL101)/ Mr. Hibbett and Ms. Robertson (BIOL102)/ Offered in sequence every year

### BIOL103 PRINCIPLES OF ENVIRONMENTAL AND CONSERVATION BIOLOGY/LECTURE, LABORATORY

This course provides an introduction to biology appropriate for those interested in environmental and conservation biology. It is designed with three general goals in mind: (1) to provide students with an understanding of the unifying themes in modern biology, (2) to introduce students to the diversity of life forms at all levels of organization, and (3) to illustrate the methods and modes of scientific inquiry in the biological sciences. Students are introduced to principles of evolution, genetics, behavior and ecology. Satisfies BIOL 101 requirement for the biology major and is one of three core requirements for the environmental science major. Fulfills the Science Perspective. Must register for lab for BIOL 101. Ms. Foster and Mr. Thackeray/ Offered every year

### BIOL105 EVOLUTION/LECTURE, LABORATORY, DISCUSSION

An introduction to the mechanisms and patterns of evolutionary change during the earth's history. Although this course will briefly survey the major evolutionary events that have occurred since life first



evolved, the emphasis will be on mechanisms of evolutionary change (e.g. mutation, natural selection, genetic drift and gene flow) and resultant patterns (e.g. phylogenetic pattern, coevolution, stasis, adaptive radiation). Prerequisites: BIOL 100, 101 or 103, and BIOL 102, or permission. Ms. Foster/Offered every year

**BIOL106 QUANTITATIVE METHODS IN BIOLOGY/LECTURE, LABORATORY**

An introduction to mathematical and statistical methods that are most useful to biologists, this course provides skills that are useful in organizing and summarizing data, graphic methods of data presentation, and testing hypotheses based on experimental results. Key mathematical methods for describing biological phenomena are included, along with basic techniques for identifying differences among groups and relationships among variables. This course may be used by biology majors to fulfill part of their mathematics requirement. Alternatively, it may be counted among the required 10 biology courses for the major.

Prerequisites: BIOL 101 or BIOL 103, and BIOL 102, and one semester of calculus (MATH 120 or MATH 124). Mr. Livdahl/Offered every year

**BIOL109 MICROBIOLOGY/LECTURE, LABORATORY**

Introduces the fundamental principles and methods of microbiology with applications to the biomedical and environmental sciences.

Emphasis is on bacteriology. Prerequisites: BIOL 100, 101 or BIOL 103, BIOL 102 and CHEM 102; or permission of instructor.

Ms. Wiatrowski/Offered every year

**BIOL110 INTRODUCTION TO BOTANICAL DIVERSITY/LECTURE, LABORATORY**

Biodiversity and structure of plants, protists and fungi are examined in a phylogenetic context. The evolution of photosynthetic mechanisms, transport systems and nutritional modes are considered, as are the ecological and economic significance of plants and other organisms traditionally studied by botanists. Prerequisites: BIOL 100, 101 or 103, and BIOL 102. Mr. Hibbett/Offered every other year

**BIOL111 BASIC HUMAN ANATOMY/LECTURE, LABORATORY**

An introduction to the anatomy of organs and organ systems in the human, including the skeletal, muscle, circulatory, digestive, urogenital, respiratory and nervous systems, along with the sense organs. The laboratory uses the cat as the model for the human organs and organ systems, which requires dissection of preserved, latex-injected specimens, and includes the human skeletal system. Staff/Offered every year

**BIOL114 MARINE BIOLOGY/LECTURE, FIELD TRIPS**

Introduces students to the diversity and ecology of life in the oceans. Discussions of basic physical oceanography and marine ecology precede studies of marine ecosystems such as salt marshes, kelp forests, rocky shores, and deep seas. Also included are the relationships of marine biology to the welfare of mankind. Prerequisites: BIOL 100, 101 or 103, and BIOL 102, or permission. Ms. Robertson/Offered every year

**BIOL116 FOREST ECOLOGY/LECTURE, DISCUSSION**

See Geography 116.

**BIOL118 GENETICS/LECTURE, LABORATORY**

Investigates the nature of genes and their role in governing heredity in both prokaryotes and eukaryotes. Includes the principles of gene transmission, the nature of gene and chromosomal mutation, principles of gene mapping. Some aspects of molecular genetics and mechanisms of gene expression will be discussed, but are not a major part of the course. Additional topics include population and quantitative genetics,

as well as the role of genes in behavior. Also includes an integrated laboratory that highlights many aspects of the lectures. Prerequisites: BIOL 100, 101 or BIOL 103, and BIOL 102. Mr. Thackeray/Offered every year

**BIOL137 CELL BIOLOGY/LECTURE, LABORATORY**

The cell as a functional unit is discussed from the molecular level to the whole cell. Included are introductions to the biochemistry and metabolic roles of some of the molecules and macromolecules that are found in cells. Also discussed are the evolution, structure and function of the various subcellular organelles and the cytoskeleton. Emphasis is placed on understanding the molecular mechanisms behind cell physiology and the experimental methods used to determine those mechanisms. Prerequisites: BIOL 100, 101 or 103, and BIOL 102.

Mr. Larochelle/Offered every year

**BIOL140 BIOLOGY OF THE BRAIN/LECTURE, LABORATORY, DISCUSSION**

An introduction to the organization and function of the nervous system. Lectures focus on the human brain with reference to knowledge obtained from animal models. Includes basic information about the anatomical, physiological and chemical properties of the brain and how these properties enable us to perceive and move around in our environment. Laboratory/discussion sessions include demonstrations of nerve-cell signaling, testing of human reflexes and sensory perception, dissections, and discussion of issues that arise in modern neuroscience: understanding the relation between the mind and brain. Fulfills the Science Perspective. Prerequisites: BIOL 101 or BIOL 102, or permission of instructor. Ms. Kennedy/Offered every year

**BIOL141 BRAIN AND BEHAVIOR/LECTURE, DISCUSSION**

An exploration of how specific neural systems are involved in various behaviors. Emphasizes first, systems where the relationships between brain and behavior are best understood, such as perception, motivation, mood, emotion, sleep and consciousness, language and attention. Second, information from the frontiers of neuroscience about how the biology of the brain changes as the result of the experiences of the individual, including mechanisms for learning and memory, is discussed. Prerequisite: BIOL 140. Ms. Kennedy/Offered every year

**BIOL201 ECOLOGY OF ATLANTIC SHORES/LECTURE, FIELD TRIP**

This course explores the ecology of marine organisms found in diverse Atlantic habitats, ranging from the rocky intertidal of New England to the coral reefs of Bermuda. The course includes lectures, field research, and a one-week trip to the Bermuda Biological Station for Research during semester break. Students must pay a fee (approximately \$1500) for the cost of lodging, meals and airfare to Bermuda. Prerequisites: BIOL 100, 101 or 103, and BIOL 102. Recommended: BIOL 114 or BIOL 216. Mr. Livdahl and Ms. Robertson/Offered every other fall

**BIOL207 CONSERVATION BIOLOGY**

Conservation Biology focuses on the biological underpinnings of efforts to preserve biodiversity in the face of increasing impacts of human activities. This seminar builds upon student background in ecology and evolution, developing skills for assessment of the fundamental biological information needed to develop policy that can lead to the protection of threatened and endangered species/populations/evolutionarily significant units. Prerequisites: Evolution 105; Ecology 216; instructor permission. Ms. Foster/Offered every other year

**BIOL210 GENOMICS SEMINAR/SEMINAR**

Sequenced genomes provide powerful new tools for life scientists. Through reading primary literature, students will gain an appreciation for how sequenced genomes have changed the way in which biologists design experiments. The limitations of genomics will also be discussed. Readings will be drawn from various disciplines within the biological sciences, and will demonstrate how genomes have enhanced our understanding of issues relating to human health, biotechnology, agriculture, and the environmental sciences. This course will provide an introduction to some of the available genome databases. Prerequisite: BIOL118. Ms. Wiatrowski, offered periodically

**BIOL214 FIELD METHODS FOR ENVIRONMENTAL SCIENCE/LECTURE, LAB**  
See Geography 216.**BIOL216 ECOLOGY/LECTURE, LABORATORY**

Provides an overview of ecology as a scientific discipline. The primary emphasis is on efforts to explain and predict the distribution and abundance of organisms, how ecological communities are composed and why they vary in time and space. Prerequisites: one or more courses from the organismal biology group and one college-level math course. Mr. Livdahl/Offered every year

**BIOL217 ECOLOGY OF INFECTIOUS DISEASE/SEMINAR**

Explores the relationship between infectious disease agents and their hosts and how that interaction can effect changes in the abundance of host and pathogen populations. Factors that contribute to the occurrence and persistence of epidemics, the evolution of virulence and transmission and strategies for controlling epidemics will be considered using theoretical approaches and case studies of diseases affecting humans and other hosts. A wide spectrum of human diseases will be considered, including human pathogens of recent concern (examples include HIV, Lyme Disease, West Nile Virus) and of historic and continuing importance (e.g., schistosomiasis, bubonic plague, malaria, smallpox, yellow fever). Prerequisites: BIOL216 or BIOL220. Mr. Livdahl/Offered every other year

**BIOL218 GENETICS AND DISEASE/LECTURE, DISCUSSION**

This course focuses on the genetic basis of human disease. Many important disorders are primarily of genetic origin, whereas others reflect the complex interplay between our genes and the environment. The Human Genome Project has provided a wide range of new tools that allow us to understand the genetic underpinnings of both kinds of disease. The course is of mixed format, with both lecture and discussion of primary literature; students will also pick a human disorder/disease and present a literature review of it in the form of an essay, poster and oral presentation. Prerequisite: BIOL118. Mr Thackeray/Offered periodically

**BIOL219 PHYSIOLOGICAL ECOLOGY OF MARINE ALGAE/LECTURE, LABORATORY**

This course will introduce upper-division undergraduate and graduate students to algal diversity and the physiological ecology of marine algae. The course will include lectures, readings, discussions and laboratory research. Topics of discussion include evolution, biochemistry, molecular biology and physiology of photosynthetic cells. In the laboratory, students will learn various techniques including measurements of photosynthesis, determination of enzyme activity and methods used to examine gene expression. The topics and techniques covered in the course are readily applied to the physiology of a broad range of organisms. Prerequisites: Either BIOL110, BIOL118 or BIOL137. Ms. Robertson/Offered every spring

**BIOL220 POPULATION BIOLOGY/LECTURE**

Examines the properties that exist only at the population level, including schedules for birth and death, population growth patterns, spatial variation in abundance, genetic variation and the factors that modify these features over time. Prerequisites: BIOL118 and BIOL216, or permission of instructor. Mr. Livdahl/Offered periodically

**BIOL221 DEVELOPMENTAL BIOLOGY/ LECTURE, LABORATORY**

Considers the fundamentals of development from the molecular level up to the organismal. Emphasis is placed on the major animal model systems. Prerequisites: BIOL137 or permission of instructor. Mr. Larochelle/Offered every other year

**BIOL223 TOPICS IN MARINE BIOLOGY/LECTURE, SEMINAR**

Provides an opportunity to delve in-depth into selected topics in marine biology. This writing intensive course uses discussions of the primary literature to explore topics in genomics, microbial ecology, oceanography, and marine biology. Limited to 15 students. Prerequisite: BIOL114. Ms. Robertson/Offered every other year.

**BIOL224 ECOLOGY OF DISEASE VECTORS/LECTURE, LABORATORY**

This course provides a field-intensive, project-oriented exposure to the biology of arthropods that transmit disease, with particular emphasis on ecology of mosquitoes. Methods include quantitative sampling techniques, species identification based on morphology and DNA, detection of medically important viruses, and experimental approaches to understanding interactions among species. The primary aim for the group will be to track the course of mosquito invasions. We will process samples obtained from school groups throughout the Midwest and Mid-Atlantic States to track the progress of a mosquito introduced from Asia. We will examine in detail two invasions that are presently under way in Bermuda and conduct experiments on egg-laying behavior during a week-long field trip to Bermuda. Field trips will also include trips to wetlands and forests in New England. Students must pay a fee (approximately \$1500) for the cost of lodging, meals and airfare to Bermuda. Prerequisites: BIOL101, and either 102 or 103. Mr. Livdahl/Offered every year

**BIOL228 MOLECULAR GENETICS/LECTURE, SEMINAR**

See Biochemistry and Molecular Biology 228.

**BIOL231 RECOMBINANT DNA/LECTURE, LABORATORY**

A laboratory-oriented course designed to introduce recombinant DNA methodology. Students undertake a semester-long project, which will vary each time the course is offered. A typical project might involve construction of a genomic library, isolation of specific clones from the library and characterization of these clones. Methods usually include DNA purification, Southern blot hybridization, restriction enzyme mapping, bacterial transformation, polymerase chain reaction (PCR) and DNA sequencing. Prerequisite: BIOL118 or permission of instructor. Mr. Larochelle/Offered every year

**BIOL232 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION**

Considers the relationships between spatial patterns in landscape structure (physical, biological and cultural) and ecological processes. Role of ecosystem pattern in mass and energy transfers, disturbance regimes, species' persistence, applications of remote sensing and GIS for landscape characterization and modeling are examined. Mr. Rogan/Offered every year



**BIOL234 SIGNAL TRANSDUCTION/LECTURE**

An advanced course exploring the various molecular and biochemical pathways through which cells communicate with themselves and the extracellular environment. Topics include protein phosphorylation, G-proteins, phospholipid metabolism, the action of oncogenes and several ionic signaling pathways. Both lectures and student presentations of papers culled from current literature. Prerequisite: BIOL137 or BIOL271 or permission of instructor. Mr. Larochelle/Offered periodically

**BIOL238 SEMINAR IN CELL BIOLOGY/SEMINAR**

Discussion, based on research papers from the current literature, will be focused on an area in cell biology selected by the participants on the first day. The weekly readings will be selected by both the students and the faculty member. The scientific content, as well as the methodology will be discussed in detail. Prerequisites: BIOL137 or permission of the instructor. Mr. Larochelle/Offered every other year.

**BIOL240 HUMAN PHYSIOLOGY/LECTURE**

Introduces the principles underlying physiological function. Lectures cover the subcellular, cellular and organ levels of organization and place a primary emphasis on the integrative processes whereby all of the diverse organs and systems contribute to the performance of the complete individual. Prerequisites: BIOL 137 or BIOL 271. Enrollment is normally restricted to juniors, seniors and graduate students. Ms. Kennedy/Offered every year

**BIOL241 ENVIRONMENTAL TOXICOLOGY/LECTURE**

See Environmental Science 241.

**BIOL242 ANIMAL BEHAVIOR/LECTURE, LABORATORY**

Examines the causes and evolution of the behavior of animals. The largest part of this course will focus on the adaptive value and evolution of behavioral patterns, but a general overview of behavioral development and causation will be provided to offer the necessary background for interpretation of the ultimate causes of behavior. Prerequisites: BIOL 105 or BIOL 220 and permission of instructor. Ms. Foster/Offered every other year

**BIOL243 SEMINAR IN EVOLUTION/SEMINAR**

Discussion of a topic in evolution selected by interested students the previous fall. Readings will be from original literature. The format will be a combination of lecture and discussion. Prerequisites: BIOL105 and BIOL118 or BIOL220. Permission of instructor required. Ms. Foster/Offered odd years

**BIOL244 BIOLOGICAL CLOCKS/DISCUSSION, LECTURE**

Every organism living at the surface of the Earth is exposed to daily, rhythmic changes in the environment. In response, an innate and well-conserved pacemaker has evolved that allows us to fit our physiology and behavior to this cycle. The course will introduce the fundamentals of how these circadian clocks (and clocks working at other time-scales) work at the molecular level, where they reside, how they exert their effects, and the effects the clock has on the whole organism. We will examine clocks in model organisms, as well as those in humans, and the relevance of biological clocks to human welfare. Prerequisite: BIOL118 Genetics, or BIOL137 Cell Biology, or permission of instructor. Mr. Thackeray/Offered periodically

**BIOL247 SENSORY PHYSIOLOGY/SEMINAR**

Discusses selected readings from classical and current research papers and books on principles and mechanisms of sensory function. Emphasis is on understanding and critically evaluating research that has been done, understanding the significance of the work in a particular reading to the field as a whole, and recognizing appropriate directions for future research in each problem area. Prerequisites: BIOL 140 or BIOL240. Ms. Kennedy/Offered every other year

**BIOL250 IMMUNOLOGY/LECTURE, DISCUSSION**

Immunology is a study of the principles of innate and adaptive immunity. We first introduce the cells of the immune system and the tissues in which they develop and through which they circulate or migrate. We discuss the specialized functions of the different types of cells and the mechanisms whereby they eliminate infection. Permission from instructor. Staff/Offered periodically

**BIOL254 MOLECULAR SYSTEMATICS AND EVOLUTION/LECTURE, LABORATORY**

This course is designed for students who are interested in either molecular or evolutionary biology. Topics to be discussed include evolution of genes and genomes, methods used to estimate evolutionary relationships using molecular data, and applications of molecular data to general problems in biology. The course will include lectures, student-led discussions, laboratory projects using computer-based applications and presentations of these projects. Prerequisites: BIOL100, 101 or 103, and BIOL102. Mr. Hibbett and Ms. Robertson/Offered periodically

**BIOL256 BIOLOGY OF SYMBIOSIS/LECTURE, LABORATORY**

This course focuses on the ecological and evolutionary aspects of symbioses, the intimate associations among different species that are ubiquitous in nature. Examples of symbioses include lichens, corals and pollination syndromes. Lectures introduce general theory regarding evolution and ecology of symbioses, and student-led discussions are based on primary research articles focusing on specific systems. Prerequisites: BIOL100, 101 or 103, and BIOL102. Mr. Hibbett/Offered every other year

**BIOL271 BIOCHEMISTRY I/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 271.

**BIOL272 BIOCHEMISTRY II/LECTURE**

See Biochemistry and Molecular Biology 272.

**BIOL297 HONORS IN BIOLOGY**

Readings and research for students in the honors program. Staff/Offered every year

**BIOL298 INTERNSHIP**

Independent research at off-campus sites for the purpose of broadening the backgrounds of qualified students. Each internship is guided by an on-site professional and a department faculty member. Staff/Offered every year

**BIOL299 DIRECTED STUDY**

Advanced readings or research under the direction of a department faculty member. Prerequisite: permission of instructor. Staff/Offered every year

**BIOL301 ECOLOGY OF ATLANTIC SHORES/LECTURE, FIELD TRIP**

See Biology 201.

**BIOL302 APPLIED ECOLOGY**

This course is intended to acquaint students with a selection of the physical and ecological principles that structure natural ecosystems, investigate how humans have altered natural ecosystems by failing to understand these principles and show (or suggest) how natural ecosystems can be returned to "health" by application of these same physical and ecological principles. The objective of the course is not to provide students with material to be memorized, but rather to give an appreciation of how disruption of physical and ecological factors and processes lead to environmental problems, and how a proper understanding of the factors and processes can assist in remedying the situation. The role of societal features (human needs and desires, political realities, etc.) in both causing the problems and remedying them will be a consistent, though low-level theme. Mr. Baker/Offered every year

**BIOL307 CONSERVATION BIOLOGY**

See Biology 207.

**BIOL310 GENOMICS SEMINAR/SEMINAR**

See Biology 210.

**BIOL314 FIELD METHODS FOR ENVIRONMENTAL SCIENCE/LECTURE, LAB**

See Geography 216.

**BIOL315 ECOLOGY OF INFECTIOUS DISEASE/SEMINAR**

See Biology 215.

**BIOL316 ECOLOGY/LECTURE, LABORATORY**

See Biology 216.

**BIOL317 SEMINAR IN GENETICS**

Students will participate in a weekly discussion of primary research papers from the current literature. The papers will be focused on an area of genetics selected by the participants on the first day, and the weekly readings will be selected by both the students and the faculty member. Both the scientific content and the methodology of each paper will be discussed in detail. Prerequisites: BIOL118 and permission of the instructor. Mr. Thackeray/Offered every other year

**BIOL318 GENETICS AND DISEASE/LECTURE, DISCUSSION**

See Biology 218.

**BIOL320 POPULATION BIOLOGY/LECTURE**

See Biology 220.

**BIOL321 DEVELOPMENTAL BIOLOGY/ LECTURE, LABORATORY**

See Biology 221.

**BIOL322 PHYSIOLOGICAL ECOLOGY OF MARINE ALGAE/LECTURE, LABORATORY**

See Biology 219.

**BIOL323 TOPICS IN MARINE BIOLOGY/LECTURE, SEMINAR**

See Biology 223.

**BIOL324 ECOLOGY OF DISEASE VECTORS/LECTURE, LABORATORY**

See Biology 224.

**BIOL328 MOLECULAR GENETICS/LECTURE, SEMINAR**

See Biochemistry and Molecular Biology 228.

**BIOL331 RECOMBINANT DNA/LECTURE, LABORATORY**

See Biology 231.

**BIOL332 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION**

See Geography 232.

**BIOL334 SIGNAL TRANSDUCTION/LECTURE**

See Biology 234.

**BIOL338 SEMINAR IN CELL BIOLOGY/SEMINAR**

See Biology 238.

**BIOL340 HUMAN PHYSIOLOGY/LECTURE**

See Biology 240.

**BIOL341 ENVIRONMENTAL TOXICOLOGY/LECTURE**

See Environmental Science 241.

**BIOL342 ANIMAL BEHAVIOR/LECTURE, LABORATORY**

See Biology 242.

**BIOL343 SEMINAR IN EVOLUTION/SEMINAR**

Discussion of a topic in evolution selected by interested students the previous fall. Readings will be from original literature. The format will be a combination of lecture and discussion. Prerequisites: BIOL105 and BIOL118 or BIOL220. Permission of instructor required. Ms. Foster/Offered odd years

**BIOL344 BIOLOGICAL CLOCKS/DISCUSSION, LECTURE**

See Biology 244.

**BIOL347 SENSORY PHYSIOLOGY/SEMINAR**

See Biology 247.

**BIOL350 GRADUATE RESEARCH SEMINAR**

Invited lecturers present seminars on varied research topics. Required for all graduate students. Staff/Offered every semester

**BIOL351 IMMUNOLOGY/LECTURE, DISCUSSION**

See Biology 250.

**BIOL354 MOLECULAR SYSTEMATICS AND EVOLUTION/LECTURE, LABORATORY**

See Biology 254.

**BIOL356 BIOLOGY OF SYMBIOSIS/LECTURE, LABORATORY**

See Biology 256.

**BIOL371 BIOCHEMISTRY I/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 271.

**BIOL372 BIOCHEMISTRY II/LECTURE**

See Biochemistry and Molecular Biology 272.

**BIOL373 SEMINAR IN FOREST ECOLOGY/SEMINAR**

See Geography 372.

**BIOL396 MASTER'S THESIS**

Offered for variable credit. Staff/Offered every year

**BIOL397 DOCTORAL DISSERTATION**

Offered for variable credit. Staff/Offered every year

**BIOL398 INTERNSHIP**

Offered for variable credit. Staff/Offered every year

**BIOL399 DIRECTED STUDY**

Offered for variable credit. Staff/Offered every year



## CHEMISTRY

### Program Faculty

Frederick Greenaway, Ph.D. - *Chair*  
Daeg Brenner, Ph.D.  
Donald Crampton, Ph.D.  
Karen Erickson, Ph.D.  
Sergio Granados-Focil, Ph.D.  
Shuanghong Huo, Ph.D.  
Noel Lazo, Ph.D.  
Luis Smith, Ph.D.  
David Thurlow, Ph.D.  
Mark Turnbull, Ph.D.

### Emeriti Faculty

Harry C. Allen Jr., Ph.D.  
Edward N. Trachtenberg, Ph.D.  
Wen-Yang Wen, Ph.D.

### Program Overview

The Chemistry Department offers an undergraduate program with the following goals in mind:

- to provide a variety of course offerings that are consistent with the accreditation requirements of the American Chemical Society;
- to offer a program that will prepare students for graduate work in chemistry and related fields;
- to provide a strong scientific background for students planning careers in health-related professions;
- and to encourage students not majoring in science to obtain an overview of the impact of science on society.

The department offers two tracks leading to a B.A. in chemistry. The requirements for the two tracks are designed to allow students to choose their course work depending upon their ultimate career goals.

### Undergraduate Requirements

All students in either track (Standard and ACS-Certified) must complete two courses in calculus (either MATH120 and 121, or MATH124 and 125) and two courses in physics (either PHYS110 and 111, or preferably PHYS120 and 121). Students must also demonstrate competence in communicating chemical concepts (e.g., through reports based on research in the chemical literature, Academic Spree Day presentations, Directed Study papers, Honors theses, or publications), and take at least four of the five ACS standardized exams (either as part of the Honors program, or as a separate assessment of their understanding of a body of knowledge in chemistry).

In addition:

#### ACS-Certified Track

Students must complete 11 courses in chemistry, including:

CHEM101 Introductory Chemistry I  
CHEM102 Introductory Chemistry II  
CHEM131 Organic Chemistry I  
CHEM132 Organic Chemistry II  
CHEM142 Environmental Chemistry or CHEM244 Bioanalytical Chemistry

CHEM250 Inorganic Chemistry  
CHEM260 Physical Chemistry I  
CHEM262 Physical Chemistry II or CHEM264 Biophysical Chemistry  
CHEM271 Biochemistry

The remaining two-course requirement is normally satisfied by advanced chemistry courses, one of which may be Directed Study or Honors. Instead of CHEM271, the student may substitute CHEM244 Bioanalytical Chemistry and CHEM264 Biophysical Chemistry, in which case they will need an additional elective because CHEM244 and CHEM264 satisfy core (not elective) requirements. On rare occasions, with advanced permission from the department, the student may substitute one advanced-level course in computer science, mathematics, physics or biology.

#### Standard Track

Students must complete 10 courses in chemistry including:

CHEM101 Introductory Chemistry I  
CHEM102 Introductory Chemistry II  
CHEM131 Organic Chemistry I  
CHEM132 Organic Chemistry II  
CHEM142 Environmental Chemistry or CHEM244 Bioanalytical Chemistry  
One semester of Physical Chemistry (either CHEM260, 262 or 264)

The remaining four courses must be advanced-level chemistry courses (200 or higher) and at least two of them must have laboratory sections. One course may be Directed Study.

The ACS-certified track meets the entrance requirements for graduate study in chemistry and is recommended for those students with a strong interest in chemistry and a desire for a profession in the chemical sciences. The standard track offers more latitude in course selection and is appropriate for those students with an interest in chemistry, but who plan to continue in one of the health professions (medical, dental or veterinary school), public-school teaching, technical sales, etc.

The requirements for the first two years are identical, so students do not need to make a final decision on which track to follow until the end of their sophomore year, but are encouraged to discuss career plans with members of the department early to make the most appropriate choice.

A student may elect as his or her first course in chemistry: CHEM010, 101, 102, 103 or 131. Science majors normally begin with CHEM101. The decision to begin with CHEM102, 103 or 131 must be made in consultation with the department and may require taking a placement examination offered at the beginning of each semester. The department encourages students with two or more years of high school chemistry to consider this option as it allows time for additional electives in the junior and senior years. The department publishes an undergraduate handbook, *Chemistry at Clark*, which provides additional information. Copies are available in the department office.

Students planning graduate study in chemistry are strongly urged to take CHEM270, 231 and/or additional advanced courses in mathematics, physics and biochemistry. All majors are encouraged to undertake independent research projects as a candidate for Honors, Directed Study or through one of the department's summer research fellowships, and are eligible to do so following completion of CHEM102.

## Honors Program

An Honors Program is offered for highly qualified and motivated majors. Students who want to enter this program must apply in writing to the department chairman prior to the beginning of their senior year. Participants are required to engage in an independent research project, participate in the department seminar program and pass a set of comprehensive examinations. Further information about the program can be obtained from the department chairman or the undergraduate handbook.

## Chemistry Minor

The requirements for a minor in chemistry are:

- Introductory Chemistry I and II (CHEM101 and 102) or CHEM103 (Accelerated Introductory Chemistry)
- Organic Chemistry I and II (CHEM131 and 132) or CHEM134 (Biological Organic Chemistry)
- Plus advanced courses in chemistry above the 134 level, to total six courses in chemistry, which may be used to satisfy requirements for other majors, minors or concentrations.

## Accelerated Degree Program

Chemistry offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

## Graduate Program

The department offers programs leading to a doctorate of philosophy with specialization in various fields of chemistry. Emphasis is placed on tailoring programs to fit the specific needs and desires of the graduate student. To facilitate this goal, a committee of interested faculty works with each student to advise and review his/her progress in research work and course requirements (five courses from specific areas of chemistry for Ph.D. students). Up to one year's equivalent of teaching apprenticeship will be required of all candidates for advanced degrees. In addition to formal course work, all students must pass qualifying examinations and submit and defend a research thesis.

Ph.D. candidates must also pass preliminary examinations and meet the department language requirement. For further details, students should consult the appropriate departmental publications. Graduate scholarships, teaching assistantships and research fellowships are available.

## Courses

### **CHEM007 SCIENCE OF WEAPONS OF MASS DESTRUCTION/LECTURE, LABORATORY**

The science behind weapons of mass destruction will be discussed. Topics include low-technology explosives, nerve agents, biological agents and nuclear devices. In each case, introductory science concepts will be used to explain how the device or agent works. Historical examples will be reviewed, such as the Oklahoma bombing, Wisconsin Army Research Lab bombing, Tokyo Sarin subway attack, World War I gas attacks, Kurdish gas attack, anthrax letters and Hiroshima/Nagasaki. The technical basis for preventing the use of these weapons will also be discussed as will be the availability of information on the Internet. Fulfills the Science Perspective. Staff/Offered every year

### **CHEM010 TOPICS IN CONTEMPORARY CHEMISTRY/LECTURE, LABORATORY**

This course is designed for students majoring in a social science or the humanities and is intended to develop a qualitative feeling about chemistry as it relates to the modern world. Approximately half the course is concerned with the development of modern chemical concepts; the remainder deals with current societal problems such as nuclear weapons and reactors, air and water quality, drugs, food additives, polymers, poisons and others. In-class and final exams.

Staff/Offered every year

### **CHEM042 SCIENCE IN SCIENCE FICTION/FIRST-YEAR SEMINAR**

Presents science topics that are relevant to the lives of students through critical analysis of works of science fiction, and subsequent writings and class discussion. The course will delve into topics such as evolution, genetic engineering, and ecology. Science fiction books and films will be supported by readings from the popular press and scientific journals about the latest scientific advances that mirror the predictions of science fiction, especially those that have raised ethical and/or political issues in today's world. After all, what was science fiction yesterday is reality today. Books will include *The Time Machine* - H.G. Wells, *Ender's Game* - Orson Scott Card, and *Neuromancer* - William Gibson. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar.

Mr. Crampton/Offered periodically

### **CHEM101 INTRODUCTORY CHEMISTRY I/LECTURE, LABORATORY**

Designed to meet the needs of science majors and the prehealth program, as well as those seeking a rigorous introduction to chemistry as part of their liberal-arts education. Introduces fundamental chemical concepts and applies them to a discussion of structure, bonding and reactivity of molecules. Knowledge of high-school algebra is necessary; high-school chemistry and physics are helpful, but not required. The laboratory teaches techniques of chemical experimentation and methods of chemical analysis. In-class and final exams, laboratory reports and quizzes. Staff/Offered every year

### **CHEM102 INTRODUCTORY CHEMISTRY II/LECTURE, LABORATORY**

Continues CHEM101 with a discussion of thermodynamics, equilibrium theory, kinetics, electrochemistry and the application of such theories to studies of structure and reactivity of molecules. The laboratory studies experimental techniques related to the lecture material. Prerequisite: CHEM101 or advanced placement. In-class and final exams, laboratory reports and quizzes. Staff/Offered every year

### **CHEM103 ACCELERATED INTRODUCTORY CHEMISTRY/LECTURE, LABORATORY**

This is a one-semester course for students with a strong background in chemistry who do not need the traditional two-semester sequence. Upon completion of CHEM103, students are eligible to go directly to CHEM131 (Organic Chemistry I), thereby accelerating their program in chemistry by one semester and allowing for additional elective courses during their junior and senior years. Topics include atomic and molecular structure, geometry, bonding, reactions, equilibria, thermodynamics, acids and bases, basic kinetics and stoichiometry. Permission of instructor. Staff/Offered every fall

### **CHEM131 ORGANIC CHEMISTRY I/LECTURE, LABORATORY**

Discusses the chemistry of carbon and its compounds. The structures and reactions of related classes of organic molecules are systematically studied with emphasis on reaction mechanism and structural factors that affect reactivity. The laboratory concentrates on the preparation



and physical, spectroscopic and chemical properties of these classes of compounds. Prerequisite: CHEM102 or advanced placement. In-class and final exams, laboratory reports. Ms. Erickson, Mr. Granados-Focil/ Offered every year

**CHEM132 ORGANIC CHEMISTRY II/LECTURE, LABORATORY**

Continuation of CHEM131. Ms. Erickson, Mr. Granados-Focil/Offered every year

**CHEM134 BIOLOGICAL ORGANIC CHEMISTRY/LECTURE, LABORATORY**

CHEM134 is the second semester of the two-semester organic-chemistry sequence and builds upon the concepts of structure, bonding, geometry, stereochemistry and fundamental reaction mechanisms developed in CHEM131. Special emphasis is placed on the biological applications of organic chemistry. Topics include the chemistry of aromatic compounds, carbonyl compounds, amines, lipids, carbohydrates, amino acids, peptides and nucleic acids. Students may receive credit for either CHEM132 or CHEM134. Prerequisite: CHEM131.

Ms. Erickson/Offered every spring

**CHEM142 ENVIRONMENTAL CHEMISTRY/LECTURE, LABORATORY**

Focuses on chemistry related to environmental problems, with emphasis on aquatic chemistry and aquatic and air pollution. Equilibrium theory is developed as a model for aquatic chemistry and chemical analyses of local aquatic systems are conducted in the laboratory according to EPA procedures. Prerequisite: CHEM102, CHEM103, or advanced placement. In-class and final exams, laboratory reports.

Mr. Greenaway/Offered every year

**CHEM222 STATISTICAL THERMODYNAMICS/LECTURE**

An introduction to statistical mechanics, thermodynamics and chemical kinetics with applications to problems in chemistry and biochemistry. Staff/Offered periodically

**CHEM228 MOLECULAR GENETICS/LECTURE, SEMINAR**

See Biochemistry and Molecular Biology 228.

**CHEM231 ADVANCED ORGANIC CHEMISTRY/LECTURE**

Provides a framework for students who wish to pursue an interest in organic chemistry beyond the level covered in CHEM131/132 by bridging the gap between material in standard elementary organic texts and the original literature. Advanced topics selected from structure and reaction mechanisms include stereochemistry and ionic, free radical, carbenoid and concerted reaction mechanisms. Prerequisite: CHEM132 or CHEM134. Ms. Erickson/Offered every other year

**CHEM233 SYNTHETIC ORGANIC CHEMISTRY/LECTURE**

The synthesis of organic compounds is discussed. Topics include the scope and limitations of general methods, mechanistic aspects and stereochemistry. Special emphasis is placed on the total synthesis of complex molecules from design of methods to execution. Prerequisite: CHEM231 or permission of instructor. Mr. Turnbull/Offered every other year

**CHEM236 ORGANOMETALLIC CHEMISTRY/LECTURE**

Covers material related to compounds containing one or more covalent metal-carbon bonds. The material progresses from the traditional organometallics, such as Grignards and cuprates, through the transition metal and main group complexes. Emphasis is placed on the properties of organometallic compounds and mechanisms of their formation and subsequent reactions. Because of the continuing development of the field, use of the primary literature is stressed. A comparison of traditional organic and inorganic chemistry is developed through this

intermediate field. Prerequisite: CHEM250 and 260 or permission of instructor. Mr. Turnbull/Offered every other year

**CHEM242 NUCLEAR SCIENCE/LECTURE**

Covers the fundamentals of nuclear chemistry and physics: production, isolation, identification, structure and measurement of radioactive atoms. Prerequisite: permission of the instructor. Mr. Brenner/Offered periodically

**CHEM244 BIOANALYTICAL CHEMISTRY/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 244.

**CHEM250 INORGANIC CHEMISTRY/LECTURE, LABORATORY**

Deals with theories of structure and bonding and their utility in explaining the chemistry of inorganic substances, especially compounds of transition metals. Topics include: molecular orbital, valence bond, and crystal field theories of bonding and examples of the use of theories in explaining the structure and reactivities of inorganic molecules; acid base theory; spectroscopic methods; and kinetics. Emphasis is placed on the interpretation of structure and reactivity in terms of basic molecular and atomic parameters. Prerequisite: CHEM132 or CHEM134 and CHEM142 or CHEM244. In-class and final exams, laboratory reports. Mr. Greenaway/Offered every year

**CHEM252 BIOINORGANIC CHEMISTRY/LECTURE**

See Biochemistry and Molecular Biology 252.

**CHEM256 INORGANIC MATERIALS/LECTURE**

Deals with structure-property relationships in inorganic materials. The range of topics includes a survey of the factors controlling structure, lattice energy, prominent structure types and variations in properties as a function of composition. Discussion of analysis methods, synthesis and the prominent uses of these materials will be incorporated into the course. Pre- or corequisite: CHEM250 or CHEM260 or PHYS131, or permission of instructor. Mr. Smith/Offered every other year

**CHEM258 CRYSTALLOGRAPHY, DIFFRACTION, AND SCATTERING METHODS/LECTURE**

This course will examine the determination of structure in crystalline biochemical, inorganic, and organic materials through diffraction methods. The effects of scattering on matter and symmetry in solids will be explored. Diffraction and scattering techniques used to characterize non-crystalline materials or measure and characterize dynamics in materials, such as small angle scattering and quasi-elastic neutron scattering, will also be covered. Prerequisite: CHEM260 or PHYS131, or permission. Mr. Smith/Offered every other year.

**CHEM260 PHYSICAL CHEMISTRY/LECTURE, LABORATORY**

CHEM260 covers thermodynamics and kinetics. Topics include the gas law, kinetic theory of gases, the first law of thermodynamics, the second law of thermodynamics, Gibbs and Helmholtz energies and their applications, nonelectrolyte solution, phase equilibrium, chemical equilibrium, and chemical kinetics. Prerequisite: MATH121 or MATH125, CHEM132 or CHEM134, PHYS110 and PHYS111, or preferably PHYS120 and PHYS121. Staff/Offered every other year

**CHEM261 MAGNETIC RESONANCE THEORY/LECTURE**

The theory of static and time-dependent interactions involved in magnetic resonance spectroscopy is presented. Energy states are defined on the basis of the time-independent Hamiltonian and reflect symmetry. The time-dependent terms in the Hamiltonian are used to develop descriptions for line-shape collapse and relaxation. Prerequisite: CHEM270. Staff/Offered every other year

**CHEM262 PHYSICAL CHEMISTRY II/LECTURE, LABORATORY**

CHEM262 covers basic principles of quantum mechanics and their application for understanding fundamental aspects of atomic structure and molecular bonding as well as molecular spectroscopy. Prerequisite: CHEM260. Staff/Offered every other year

**CHEM264 BIOPHYSICAL CHEMISTRY/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 264.

**CHEM266 BIOMOLECULAR NMR/LECTURE**

Covers theory and application of multidimensional nuclear magnetic resonance (NMR) spectroscopy for the study of structure and dynamics of biomolecules in solution. Staff/Offered periodically

**CHEM267 COMPUTATIONAL CHEMISTRY: ELECTRONIC STRUCTURE METHODS/LECTURE, LABORATORY**

This course is designed to introduce the student to the electronic structure modeling methods, which are available to investigate the chemical phenomena. It will provide a hands-on experience using the electronic structure modeling software packages to study the properties of molecules and reactions. Topics will include molecular orbital theory and calculations on molecular energies and structures, energies and structures of transition states, bond and reaction energies, atomic charges, IR spectrum, NMR properties and reaction pathways.

Prerequisite: CHEM262 or CHEM270. Ms. Huo/Offered every other year

**CHEM270 QUANTUM CHEMISTRY/LECTURE**

Essentially an introduction to quantum mechanics. Covers elementary quantum mechanical treatments of the structure of atoms and molecules. Prerequisite: CHEM262 or CHEM264. Mr. Brenner/Offered periodically

**CHEM271 BIOCHEMISTRY I/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 271.

**CHEM272 BIOCHEMISTRY II/LECTURE**

See Biochemistry and Molecular Biology 272.

**CHEM273 PRINCIPLES OF MOLECULAR MODELING/LECTURE**

This course is intended mainly for advanced undergraduates and graduate students. The aim of the course is to introduce the principles and algorithms of molecular modeling and to illustrate how these algorithms can be used to study biochemical/biophysical phenomena. We will go over basic elements of classical molecular simulations, focusing of force fields, energy minimization, molecular dynamics and Monte Carlo. Prerequisite: CHEM260. Ms. Huo/Offered every other year

**CHEM275 PROTEIN CHEMISTRY/LECTURE**

See Biochemistry and Molecular Biology 275.

**CHEM279 COMPUTER BIOCHEMISTRY/LECTURE**

The course will provide a hands-on experience using computers to analyze chemical and biochemical systems. Students will be introduced to the use of relevant Web-based and commercial software packages. The course will meet one afternoon (3 hours) per week. The exact topics to be covered may vary from year to year as new software packages become available. Topics will include retrieval and analysis of

DNA and protein sequence information from national databases; use of sequence information to identify homologous nucleic acids or proteins, design cloning experiments, and predict protein secondary and tertiary structures; simulations of protein dynamics and ligand binding; and using X-ray crystallography and NMR data to determine protein structure and dynamics. Prerequisite: BCMB271. Staff/Offered periodically

**CHEM281 POLYMER SCIENCE/LECTURE**

The physical chemistry of synthetic polymers is presented, including discussion of kinetic mechanisms of polymerization, molecular weight distributions, unperturbed dimensions, structure and conformation, viscosity, and dynamic properties. Specific experimental methods useful in polymer chemistry such as osmotic pressure, light scattering, gel permeation chromatography, viscoelastic response, NMR, and dielectric response also are reviewed. Prerequisite: CHEM262 or CHEM264. Mr. Granados-Focil/Offered periodically

**CHEM289 RESEARCH METHODS/LECTURE, LABORATORY**

Deals with the application of analytical tools widely used in the laboratory. Topics include NMR, EPR, IR, Raman, UV-visible, mass and fluorescence spectroscopy, chromatography, electrophoresis, electrochemistry and other techniques. Emphasizes practical knowledge for data interpretation and instrument operation. Quarter-credit courses lasting four to five weeks are offered periodically. Prerequisite: CHEM262 or 264 or permission. Staff/Offered periodically

**CHEM297 HONORS**

For majors seeking departmental honors in chemistry. Involves a laboratory research project and participation in department seminars. Offered for variable credit. Prerequisite: permission of the department chair. Staff/Offered every semester

**CHEM299 DIRECTED STUDY**

Individual investigations that involve laboratory and literature research. Offered for variable credit. Prerequisite: permission. Staff/Offered every semester

**CHEM322 STATISTICAL THERMODYNAMICS/LECTURE**

See Chemistry 222.

**CHEM328 MOLECULAR GENETICS**

See Biochemistry and Molecular Biology 228.

**CHEM331 ADVANCED ORGANIC CHEMISTRY/LECTURE**

See Chemistry 231.

**CHEM333 SYNTHETIC ORGANIC CHEMISTRY/LECTURE**

See Chemistry 233.

**CHEM336 ORGANOMETALLIC CHEMISTRY/LECTURE**

See Chemistry 236.

**CHEM342 NUCLEAR SCIENCE/LECTURE**

See Chemistry 242.

**CHEM350 INORGANIC CHEMISTRY/LECTURE, LABORATORY**

See Chemistry 250.

**CHEM 352 BIOINORGANIC CHEMISTRY**

See Biochemistry and Molecular Biology 252.



**CHEM356 INORGANIC MATERIALS/LECTURE**

See Chemistry 256.

**CHEM 358 CRYSTALLOGRAPHY, DIFFRACTION, AND SCATTERING METHODS**

See Chemistry 258.

**CHEM360 PHYSICAL CHEMISTRY/LECTURE, LABORATORY**

See Chemistry 260.

**CHEM361 MAGNETIC RESONANCE THEORY/LECTURE**

See Chemistry 261.

**CHEM362 PHYSICAL CHEMISTRY II/LECTURE, LABORATORY**

See Chemistry 262.

**CHEM364 BIOPHYSICAL CHEMISTRY**

See Biochemistry and Molecular Biology 264.

**CHEM366 BIOMOLECULAR NMR/LECTURE**

See Chemistry 266.

**CHEM367 COMPUTATIONAL CHEMISTRY: ELECTRONIC STRUCTURE METHODS/LECTURE, LABORATORY**

See Chemistry 267.

**CHEM370 QUANTUM CHEMISTRY/LECTURE**

See Chemistry 270.

**CHEM371 BIOCHEMISTRY I**

See Biochemistry and Molecular Biology 271.

**CHEM372 BIOCHEMISTRY II**

See Biochemistry and Molecular Biology 272.

**CHEM373 PRINCIPLES OF MOLECULAR MODELING/LECTURE**

See Chemistry 273.

**CHEM375 PROTEIN CHEMISTRY**

See Biochemistry and Molecular Biology 275.

**CHEM379 COMPUTER BIOCHEMISTRY/LECTURE**

See Chemistry 279.

**CHEM380 RESEARCH CONFERENCE/SEMINAR**

Consists of reports on research and discussion of recently published work. Guest lectures, staff, graduate students/Offered every semester

**CHEM381 POLYMER SCIENCE/LECTURE**

See Chemistry 281.

**CHEM389 RESEARCH METHODS/LECTURE, LABORATORY**

See Chemistry 289.

**CHEM399 INDEPENDENT STUDY**

See Chemistry 399.

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**COMMUNICATION AND CULTURE****Program Faculty**

Matthew Malsky, Ph.D. - *Director*

Parminder Bhachu, Ph.D.

Marcia Butzel, Ph.D.

Betsy P. Huang, Ph.D.

Fern Johnson, Ph.D.

Benjamin Korstvedt, Ph.D.

Sarah Michaels, Ph.D.

Rhys Townsend, Ph.D.

Jaan Valsiner, Ph.D.

Kristina Wilson, Ph.D.

**Part-Time Faculty**

Kirk Jalbert, M.F.A.

D. L. Stephenson, Ph.D.

**Program Overview**

The communication and culture major is designed to engage students in focused inquiry into the cultural foundations of communication in its various forms. As a liberal-arts major, the program of study emphasizes the development of a conceptual framework for understanding the role of communication in both transmitting and creating culture through practices of verbal and nonverbal communication. Through an interdisciplinary approach involving faculty from different fields of expertise in the humanities and social sciences, students study media, discourse and global influences and developments in communication. The curriculum covers historical and current topics, and the range of communicative forms considered includes visual and graphic images, everyday discourse, literary works, journalistic writing, music and material productions. Although not a production-oriented or preprofessional major, students have opportunities for practicum and internship learning. The faculty is committed to providing the type of sound critical and conceptual grasp of communication that is essential for intelligent participation and leadership in the various fields of communication.

For details regarding the major, students should consult the Majors' Handbook, which is available online, in the Communication and Culture Program Office, and at the Academic Advising Center.

The major is organized into three paths of emphasis: (1) media dimensions, (2) discourse dimensions and (3) global dimensions, which include courses in both media and discourse studies that emphasize some aspect of global communication. With the exception of the introductory course (COMM101), most courses are cross-referenced with the departments in which they originate.

**Undergraduate Requirements**

Requirements for the Major (11 course units minimum): Each student selects, in consultation with her or his adviser, a path of emphasis from the three available options. Within that path, students concentrate their elective courses and build further specialization through choices of advanced seminars and internships. No exceptions will be made to the structure listed below.

1. COMM101 Communication and Culture, 1 unit
2. Seven elective courses, 7 units (additional courses may be taken)
  - minimum of four and maximum of five must be in path of emphasis
  - minimum of three must be at the 200 level
  - maximum of two practicum courses, which must be in an approved sequence (optional)
3. One Integrative Seminar (200 level), 1 unit
4. Approved internship or project, 1-2 units
5. Senior Capstone Seminar or Project in path of emphasis, 1-2 units (Honors thesis option for qualified students.)

Students must complete COMM101 before taking the integrated seminar.

Course prerequisites are listed for specific courses and may be different for communication and culture majors than for students taking the course in the department from which it is cross-referenced. Students should consult semester schedules carefully to determine prerequisites.

Students must earn a grade of C or better in all courses contributing to the major program of study.

For more information about the communication and culture major, call 508-793-7180.

## Courses

### ***Introductory Course***

COMM101 Communication and Culture

### **PATH 1: MEDIA DIMENSIONS**

*Electives in Media Dimensions:*

#### **Communication and Culture**

COMM145 Do-It-Yourself Media  
 COMM168 Image Theory  
 COMM170 Computer Mediated Communication  
 COMM221 Media Policy and Democracy

#### **Art History**

COMM010 From the Stone Age to Our Age  
 COMM243 Design in the 20th Century: Arts & Crafts to IKEA  
 COMM245 Urban Art and Society in Jazz Age New York

#### **English**

COMM205 Culture and the News

#### **Foreign Languages and Literatures**

COMM206 The Work of Art and Cultural Criticism from Wagner to the Present

#### **Geography**

COMM258 Internet Geography

#### **History**

COMM211 American Consumer Culture

#### **Music**

COMM012 Music as Culture  
 COMM013 Pop Music in USA  
 COMM104 Music and Modernism  
 COMM108 20th-Century Music  
 COMM146 Recording Practice and Audio Art  
 COMM210 History of Music Seminar

### **Screen Studies**

COMM103 Introduction to Screen Studies  
 COMM117 Factual Film and Television  
 COMM118 History of American Broadcasting and Electronic Media  
 COMM171 Storytelling through Video: Documentary and Dramatic Production  
 COMM214 Social and Cultural Issue Documentary  
 COMM235 Images of Youth  
 COMM261 Critical Perspectives of T.V. Culture

### **Sociology**

COMM136 Effects of Mass Media

### **Studio Arts**

COMM123 Intermediate Photography  
 COMM125 Graphic Design Projects  
 COMM208 Typography  
 COMM209 Introduction to Interactive Design  
 COMM250 Photography Studio  
 COMM254 Graphic Design Studio

### **PATH 2: DISCOURSE DIMENSIONS**

*Electives in Discourse Dimensions:*

#### **Communication and Culture**

COMM150 Discourse and Cultural Studies: Field Research

#### **Comparative Literature**

COMM134 Latino Literature and Media Arts

#### **Education**

COMM020 Transformative Schooling: Culture, Community, Education and Society

#### **English**

COMM102 Documentary Writing  
 COMM114 American Talk  
 COMM196 Strategic Speaking  
 COMM202 Feature Writing  
 COMM204 Writing for Magazines  
 COMM215 Language and Culture in the United States  
 COMM248 Signs/Crossroads: Semiotics  
 COMM272 Ethnic America: Literary and Theoretical Perspectives  
 COMM279 Fictions of Asian America  
 COMM293 History of the English Language

#### **Philosophy**

COMM242 Philosophy of Language

#### **Psychology**

COMM158 Discourse, Subjectivity and the Self  
 COMM195 Psychology, Communication and the Self  
 COMM247 Theoretical Models of Communication in Psychology  
 COMM255 Gender Development and Language  
 COMM262 Narrative Perspective  
 COMM268 Communicative Development

#### **Theater Arts**

COMM212 Actor as Thinker



### **PATH 3: GLOBAL DIMENSIONS**

*Electives in Global Dimensions:*

#### **Communication and Culture**

COMM246 Global Communication and the Spaces of Cultural Production

#### **Art History**

COMM159 Latin-American Art  
COMM164 The Arts of Asia  
COMM165 The Arts of Islam  
COMM239 Renaissance and Baroque/Seminar

#### **Comparative Literature**

COMM130 The National Imagination

#### **Foreign Languages and Literatures**

COMM129 Media Workshop in French  
COMM144 Francophone Literature and Film  
COMM138 Studies in Contemporary French Culture

#### **Geography**

COMM017 Culture, Place and the Environment  
COMM137 Gender and Environment

#### **Psychology**

COMM156 Cultural Psychology  
COMM157 Cultural Psychology of Urban Living

#### **Screen Studies**

COMM224 World Cinema and Global Culture  
COMM263 Topics in French Cinema: Popular Genres, Block Busters, and Remakes

#### **Sociology**

COMM160 Global Cultures and Identities  
COMM278 The Creation of Nationalisms, Nationalist Culture and Symbols  
COMM260 Roots and Routes

### **Integrative Seminars**

Integrative seminars are courses at the 200 level that treat a particular topic through different disciplinary perspectives or that bring together two or more topics from different domains of communication and cultural analysis. These seminars are listed separately below. At least one integrative seminar is offered each semester and new topics may be added. Interested students may petition the director of the program to substitute a second integrative seminar for an elective course.

### **Integrative Seminar Courses**

#### **Art History**

COMM216 Architecture and Democracy  
COMM234 Converging Cultures in the Age of Discovery

#### **English**

COMM257 Language at Issue  
COMM252 Cultural Discourses of Advertising

#### **Music**

COMM231 Soundtracks

#### **Psychology**

COMM251 Language Development

#### **Sociology**

COMM230 Sociology of Culture  
COMM275 Culture, Consumption and Class in Local and Global Contexts

### **Senior Capstone**

The senior capstone in communication and culture requires that each student participate in original research or creative activity or produce an individual project related to some aspect of his or her path emphasis. At the end of the junior year, majors receive information about options available for the senior capstone. Based on this information, each student selects one of the senior capstone seminars, proposes an independent study project or, if qualified, proposes an honors thesis project. All projects and theses must be supervised by a member of the communication and culture faculty. For honors theses, a second faculty member, who will serve as an evaluator, is selected through a consultation process between the student and his or her thesis adviser. Information regarding honors theses, which are yearlong projects, is contained in the Majors' Handbook.

Courses that have been offered as senior capstone seminars are listed below. New courses are added from time to time. Note that a student who takes a designated capstone seminar earlier than the senior year may count this course toward major elective requirements but may not use the course to fulfill the capstone requirement.

### **Senior Capstone Courses**

#### **English**

COMM295 Gender and Discourse

#### **Music**

COMM274 Audio Culture

#### **Psychology**

COMM276 Advanced Topics in Cultural Psychology (Topic Dependent)

#### **Screen Studies**

COMM285 Film as Narration  
COMM288 Gender and Film  
COMM292 Capstone: ReViewing Disney

#### **Sociology**

COMM286 Media Effects Workshop  
COMM294 Global Ethnographies

### **Communication and Culture Minor**

Requirements for Minor: The minor in communication and culture is designed to provide concentrated study in one of the three paths. The minor requires a minimum total of six course units as follows.

1. COMM101: Communication and Culture
2. Five additional COMM courses:
  - Three courses in one path of emphasis
  - One course in each of the other two paths of emphasis
  - Minimum of two 200-level courses
  - Maximum of one practicum course (beyond the introductory level)

Students must earn a grade of C or better in all courses contributing to the minor.

## Courses

### **ARTH105 THE AEGEAN WORLD**

See Art History 105.

### **ARTS250 ADVANCED PHOTOGRAPHY STUDIO**

See Studio Art 250.

### **COMM010 FROM THE STONE AGE TO OUR AGE: MONUMENTS AND MASTERPIECES OF WESTERN ART/LECTURE, DISCUSSION**

See Art History 010.

### **COMM012 MUSIC AS CULTURE/LECTURE, DISCUSSION**

See Music 011.

### **COMM013 POP MUSIC IN THE USA/LECTURE, DISCUSSION**

See Music 012.

### **COMM017 CULTURE, PLACE AND THE ENVIRONMENT/LECTURE**

See Geography 017.

### **COMM020 TRANSFORMATIVE SCHOOLING: DOCUMENTARY VIDEO FOR SOCIAL CHANGE/FIRST-YEAR SEMINAR**

See Urban Education and Teacher Research 112.

### **COMM040 COOL/FIRST-YEAR SEMINAR**

What is 'cool'? — In this FYS we will try to answer this question by developing a 'cool scale' — a measurement by use of which we can "measure" how cool people think they are. Constructing this scale will consist of developing scenarios that reflect aspects of 'cool' and testing them out empirically with a representative sample of participants. Parallel to the development of this methodological tool we will begin to address in a critical fashion what 'being cool' implies for people's overall well-being, whether 'cool' is a particular cultural (American?) emotional style, how it historically came to existence, and how it may be infiltrating other cultures in a globalizing fashion. Mr. Bamberg/Offered periodically

### **COMM050 COMMUNICATION AND CULTURE IN MAIN SOUTH/FIRST-YEAR SEMINAR**

This seminar covers the same content as COMM101 which is a requirement for the Communication & Culture major and minor. However, this course will be run as a hands-on, discussion-based seminar, with students doing original research and taking an active role in class discussion. All of the ideas and tools introduced in the course will be put to use in investigations of communication and culture in the Main South Neighborhood of Worcester. We will investigate local media, public art, and both formal and informal learning in the neighborhood. Seminar participants will have a chance to collaborate with neighborhood students on multi-media projects, contributing to a community-based website. The course will be interdisciplinary, drawing on psychological, anthropological, sociological, technological, aesthetic, cinematic, semiotic, and cultural studies points of view and methodologies. There will be a particular emphasis on the roles of talk, text, and image in social life and how they relate to power, access, and equity in the world. Fulfills the Values Perspective requirement.

### **COMM099 COMPUTERS IN OUR WORLD/LECTURE, LABORATORY**

See Computer Science 099.

### **COMM101 COMMUNICATION AND CULTURE**

Examines the ways in which communication creates and represents ideology, social orders and cultural identities. Emphasis is on critical analysis of communication in contemporary society. Subjects include culture-based metaphor, nonverbal communication, advertising, print media and television. Staff/Offered every year

### **COMM102 DOCUMENTARY WRITING**

See English 102.

### **COMM103 INTRODUCTION TO SCREEN ARTS**

See Screen Studies 010.

### **COMM104 MUSIC AND MODERNISM IN SOCIETY, 1885-1945/ LECTURE, DISCUSSION**

See Music 104.

### **COMM108 20TH-CENTURY MUSICAL EXPLORATIONS/LECTURE, DISCUSSION**

See Music 103.

### **COMM110 AMERICAN SIGN LANGUAGE I**

This course is an introduction to American Sign Language (ASL), a visual/gestural language used by Deaf people in the United States and Canada. Students learn visual readiness skills to recognize and express spatial relationships and to use appropriate non-manual signals, such as facial expressions and body movements. Course topics include communicative functions, vocabulary, grammar and cultural aspects of the Deaf community. The course also covers functional communication to help students understand the needs and history of the Deaf as well as their community. Students learn the differences between American Sign Language and oral communication for the deaf. Please note this course is graded Pass/No Credit. Students are required to receive a grade of C- or better in order to receive credit for the course. Mr. Dunn/offered every year.

### **COMM111 AMERICAN SIGN LANGUAGE II**

This course, a continuation of American Sign Language I, will continue to emphasize visual readiness skills and conversational skills by utilizing grammatical principles, language functions and cultural behaviors. The student will increase fluency in ASL, describing behavior, making requests, giving directions, etc. Communicative functions, finger spelling, vocabulary, grammar and cultural aspects of the Deaf community will be studied throughout the course. Mr. Dunn/Offered every year

### **COMM114 AMERICAN TALK/FIRST-YEAR SEMINAR**

See English 114.

### **COMM117 FACTUAL FILM AND TELEVISION**

See Screen Studies 123.

### **COMM118 HISTORY OF AMERICAN BROADCASTING AND ELECTRONIC MEDIA**

See Screen Studies 122.

### **COMM123 INTERMEDIATE PHOTOGRAPHY/STUDIO, LECTURE, DISCUSSION**

See Studio Art 121.

### **COMM124 POPULAR CULTURE IN FRANCE**

See French 124.

### **COMM125 GRAPHIC DESIGN PROJECTS/STUDIO, LECTURE, DISCUSSION**

See Studio Art 125.

### **COMM126 HISTORY OF INTERNATIONAL CINEMA SINCE 1960**

See Screen Studies 124.

### **COMM129 MEDIA WORKSHOP IN FRENCH**

See French 127.

### **COMM130 THE NATIONAL IMAGINATION**

See Comparative Literature 130.

### **COMM133 STUDIES IN HISPANIC CULTURE/LECTURE, DISCUSSION**

See Spanish 133.



**COMM134 LATINO LITERATURE AND MEDIA ARTS**

See Spanish 134.

**COMM135 MEDIA AND SOCIETY/LECTURE, DISCUSSION**

See Sociology 135.

**COMM136 EFFECTS OF MASS MEDIA [FORMERLY SOC 273]**

See Sociology 136.

**COMM138 STUDIES IN CONTEMPORARY FRENCH CULTURE**

See French 137.

**COMM144 FRANCOPHONE LITERATURE AND FILM**

See French 140.

**COMM145 EXPERIMENTAL VIDEO PRODUCTION**

This course explores the genre of Experimental Film within two contexts: First, we will aim a critical eye toward the history and current articulations of this form of film, and Second, students will utilize what they've learned by producing three of their own experimental videos. The course begins with an introduction to the genre, and then explores Experimental Film/Video according to three different categories: Experimentation with Narrative, Experimentation with Form, and Experimentation with the line between Fact and Fiction. Students will emerge from this course with a solid foundation in the history and theory of experimental film/video as evidenced by their creation of video projects that utilize, reflect, and expand upon filmic examples of this highly creative and challenging form of cinematic art and expression. Mr. Anderson/Offered periodically

**COMM146 RECORDING PRACTICE AND AUDIO ART/SEMINAR**

See Music 142.

**COMM150 DISCOURSE AND CULTURAL STUDIES/FIELD RESEARCH**

This course studies the nature of human communication, both in language and other sign systems (e.g., cultural artifacts, media and social interactions) within and across diverse cultures and social institutions. It focuses on tools for analyzing communication in context with reference to its psychological, social, cultural and political implications. Ms. Michaels/Offered every year

**COMM156 CULTURAL PSYCHOLOGY/LECTURE, DISCUSSION**

See Psychology 156.

**COMM157 CULTURAL PSYCHOLOGY OF URBAN LIVING/LECTURE, DISCUSSION**

See Psychology 157.

**COMM158 DISCOURSE, SUBJECTIVITY AND SELF/LECTURE, DISCUSSION**

See Psychology 158.

**COMM159 LATIN-AMERICAN ART/LECTURE, DISCUSSION**

See Art History 159.

**COMM160 GLOBAL CULTURES AND IDENTITIES/LECTURE, DISCUSSION**

See Sociology 160.

**COMM164 THE ARTS OF ASIA/LECTURE, DISCUSSION**

See Art History 160.

**COMM165 THE ARTS OF ISLAM/LECTURE, DISCUSSION**

See Art History 161.

**COMM168 IMAGE THEORY**

Image Theory is a course designed to dissect and analyze the role images play in the collective life of contemporary society. Within our ever-increasing utilization of modern medias such as photography, film, video, and the internet to transmit image-based information, new rela-

tionships have transformed the way we communicate with other people as well as the way we receive, structure and learn new information. How has the image become the predominant method of communicating ideas? How do these images affect the way we experience and remember events? How does this exposure alter our own self-identity? Finally, how have visual artists used these image relationships to create powerful and lasting work? We will use these topics as a launching point to create, employ and analyze image-based communications of our own within these various contexts. Mr. Jalbert/Offered periodically

**COMM170 COMPUTER MEDIATED COMMUNICATION**

This course is intended to provide an introduction to those social functions and communities evolving from and developed around computer-aided technologies. Beginning with a definition of computer-mediated communication, students will progress through a meaningful discussion designed to plant them squarely as the focus of our study. How do THEY use these technologies and what is the effect on their lives? In addition to the standard foray of relevant readings and discussions, students will be asked to complete weekly assignments intended to submerge them in virtual spaces and online communities, as well as inter-student communication projects via portable devices, such as cell phones. Upon successful completion of the course, a student will have a better understanding of how technology affects the way they operate and communicate within their daily lives. Mr. Jalbert/Offered periodically

**COMM171 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION**

See Screen Studies 171.

**COMM195 DISCOURSE, SELF AND FEELING/FIRST-YEAR SEMINAR**

See Psychology 193.

**COMM196 STRATEGIC SPEAKING/WORKSHOP**

See English 196.

**COMM202 FEATURE WRITING/WORKSHOP**

See English 202.

**COMM204 WRITING FOR MAGAZINES/SEMINAR**

See English 204.

**COMM205 CULTURE AND THE NEWS/LECTURE, DISCUSSION**

See English 205.

**COMM206 THE TOTAL WORK OF ART AND CULTURAL CRITICISM FROM WAGNER TO THE PRESENT/SEMINAR**

See German 205.

**COMM208 TYPOGRAPHY**

See Studio Art 208.

**COMM209 INTRODUCTION TO INTERACTIVE DESIGN**

See Studio Art 209.

**COMM210 SEMINAR IN MUSIC HISTORY AND CRITICISM**

See Music 210.

**COMM211 AMERICAN CONSUMER CULTURE/SEMINAR**

See History 211.

**COMM212 ACTOR AS THINKER/STUDIO, LECTURE, DISCUSSION**

See Theater Arts 212.

**COMM214 SOCIAL AND CULTURAL ISSUE DOCUMENTARY**

See Screen Studies 214.

**COMM215 LANGUAGE AND CULTURE IN THE UNITED STATES/LECTURE, DISCUSSION**

See English 215.

**COMM216 ARCHITECTURE AND DEMOCRACY/SEMINAR**

See Art History 216.

**COMM219 SCIENCE FICTION FILM: CITY OF THE FUTURE**

See Screen Studies 215.

**COMM221 MEDIA POLICY AND DEMOCRACY**

In this course, students will look at the development of media regulation in the United States, starting with the founding of the Federal Communications Commission up to its most recent decisions on media policy. In addition to discussing the ways in which the legislation specifically addresses free-market competition, public interest and freedom of speech, we explore society's understandings of these issues and how they are shaped by policy. Students will also focus on the methods of the public-access television and radio movement in their attempt to produce media that serves public interest and gain some control of the corporately dominated airwaves. Staff/Offered periodically

**COMM224 WORLD CINEMA AND GLOBAL CULTURE**

See Screen Studies 224.

**COMM230 MEANING, POLITICS AND DIFFERENCE: SOCIOLOGY OF CULTURE/LECTURE, DISCUSSION**

See Sociology 231.

**COMM231 SOUNDTRACKS/LECTURE**

See Music 160.

**COMM234 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR**

See Art History 232.

**COMM235 IMAGES OF YOUTH**

See Screen Studies 230.

**COMM239 SPECIAL TOPICS: RENAISSANCE AND BAROQUE ART/SEMINAR**

See Art History 239.

**COMM242 PHILOSOPHY OF LANGUAGE/LECTURE, DISCUSSION**

See Philosophy 242.

**COMM243 DESIGN IN THE 20TH CENTURY: ARTS & CRAFTS TO IKEA**

See Art History 243.

**COMM245 URBAN ART & SOCIETY IN JAZZ AGE NEW YORK/SEMINAR**

See Art History 245.

**COMM246 GLOBAL COMMUNICATION AND THE SPACES OF CULTURAL PRODUCTION**

This course traces the historical development and uses of mass communications technologies in what is euphemistically, if not geographically, called the West. This course connects contemporary mass media development with Western European expansion in North America, South and Central America, Africa Asia, and the Middle East and the strategic deployment of Western European economic, political, and cultural value systems to these geographically and politically constructed regions.

**COMM247 THEORETICAL MODELS OF COMMUNICATION IN PSYCHOLOGY/FIRST SEMINAR**

See Psychology 247.

**COMM248 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR**

See English 249.

**COMM251 LANGUAGE DEVELOPMENT/FIRST SEMINAR**

See Psychology 251.

**COMM252 CULTURAL DISCOURSES OF ADVERTISING/SEMINAR**

See English 252.

**COMM254 GRAPHIC DESIGN STUDIO**

See Studio Art 254.

**COMM255 GENDER DEVELOPMENT AND LANGUAGE/FIRST SEMINAR**

See Psychology 254.

**COMM257 LANGUAGE AT ISSUE/SEMINAR**

See English 257.

**COMM258 INTERNET GEOGRAPHY: SOCIOECONOMIC IMPACTS OF INFORMATION TECHNOLOGIES/LECTURE, DISCUSSION**

See Geography 257.

**COMM259 FUTURING THE NEWS/SEMINAR**

See English 259.

**COMM260 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL/LECTURE, DISCUSSION**

See Sociology 260.

**COMM261 CRITICAL PERSPECTIVES ON TELEVISION**

See Screen Studies 261.

**COMM262 NARRATIVE PERSPECTIVE IN PSYCHOLOGY/CAPSTONE SEMINAR**

See Psychology 260.

**COMM263 STUDIES IN FRENCH CINEMA**

See Screen Studies 263.

**COMM268 COMMUNICATIVE DEVELOPMENT/CAPSTONE SEMINAR**

See Psychology 268.

**COMM272 ETHNIC AMERICA: LITERARY AND THEORETICAL PERSPECTIVES/SEMINAR**

See English 276.

**COMM273 CONTEMPORARY BRITISH LITERATURE, CULTURE AND FILM**

See English 278.

**COMM274 AUDIO CULTURE**

See Music 200.

**COMM275 CULTURE, CONSUMPTION AND CLASS IN LOCAL AND GLOBAL CONTEXTS/LECTURE, DISCUSSION**

See Sociology 250.

**COMM276 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY/CAPSTONE SEMINAR**

See Psychology 276.

**COMM278 THE CREATION OF NATIONALISM, NATIONALIST CULTURES AND SYMBOLS/LECTURE, DISCUSSION**

See Sociology 255.

**COMM279 FICTIONS OF ASIAN AMERICA/SEMINAR**

See English 279.

**COMM285 FILM AS NARRATION**

See Screen Studies 284.

**COMM288 GENDER AND FILM**

See Screen Studies 288.

**COMM291 CAPSTONE COURSE**

See Screen Studies 290.



**COMM293 HISTORY OF THE ENGLISH LANGUAGE/ SEMINAR**

See English 294.

**COMM294 GLOBAL ETHNOGRAPHIES: ETHNOGRAPHERS IN THE MAKING FOR THE 21ST CENTURY/SEMINAR**

See Sociology 294.

**COMM295 GENDER AND DISCOURSE/SEMINAR**

See English 295.

**COMM296 CAPSTONE COURSE**

See Screen Studies 291.

**GEOG136 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION**

See Geography 136.

**MUSC141 COMPUTERS AND MUSIC/LECTURE, DISCUSSION**

See Music 141.

**COMPARATIVE LITERATURE****Program Faculty**

Everett Fox, Ph.D. - *Acting Chair*

Belén Atienza, Ph.D.

Paul Burke, Ph.D.

Marvin D'Lugo, Ph.D.

William Ferguson, Ph.D.

Odile Ferly, Ph.D.

Beth Gale, Ph.D.

Michael Spingler, Ph.D.

Robert Tobin, Ph.D.

**Adjunct Faculty**

Marcia Butzel, Ph.D.

SunHee Kim Gertz, Ph.D.

Benjamin Korstvedt, Ph.D.

Gary Overvold, Ph.D.

**Program Overview**

Comparative literature is a wide-ranging, multicultural program of studies in poetry, prose, drama, film and related arts. Housed in the Foreign Languages and Literatures Department, the program is by nature interdisciplinary and has strong ties with other departments in the University. In addition to the courses offered by the department in comparative literature and literatures in foreign languages, the student is encouraged to take courses in English, history, philosophy, and visual and performing arts. One of the special aspects of the program is the emphasis on developing a practical and critical approach to texts. This may take the form of play production, seminars in translation of lyric poetry and drama, and supervised work in contemporary critical theory (i.e., relations between text and performance, spectator positioning and reader response).

**Undergraduate Requirements**

The Comparative Literature major consists of:

1. Two courses in a foreign language at the intermediate level or above, or its equivalent as determined by the major's adviser.
2. Demonstration of a reading knowledge of a foreign language, as determined either by completion of a literature course in a foreign language above the intermediate level or approval the major adviser.

3. Eight courses in literature, film or related arts selected in consultation with a department adviser from the offerings in several departments and programs including Foreign Languages, English, Art History, Screen Studies, and Theater Arts. These eight courses must include: (a) one foundation course in comparative literature, such as "Shock of the New" or "Journeys" (b) CMLT130:Studies in National Imagination and (c) a senior directed study project (capstone).

Literature courses presented to demonstrate reading knowledge of a foreign language may be counted in this group of eight courses. No more than one foreign language course above the intermediate level taken to fulfill requirement 1 may be double-counted for fulfillment of requirement 3.

**Comparative Literature Minor**

The Comparative Literature minor should consist of:

1. Two courses in a foreign language at the intermediate level or above
2. Six courses in literature, film or related arts, selected in consultation with a department adviser, one of which must be CMLT 130: Studies in the National Imagination. These six courses can be selected from the offerings in several departments and programs including Foreign Languages, English, Art History, Screen Studies, and Theater Arts. Literature courses presented to demonstrate reading knowledge of a foreign language may be counted in this group of eight courses. No more than one foreign language course above the intermediate level taken to fulfill requirement 1 may be double-counted for fulfillment of requirement 2.

**Courses****CMLT112 FAIRY TALES OF THE WORLD/LECTURE, DISCUSSION/FIRST-YEAR SEMINAR**

See French 112.

**CMLT117 READING THE NARRATIVES OF THE HEBREW BIBLE/FIRST-YEAR SEMINAR**

See Jewish Studies 117.

**CMLT118 INTRODUCTION TO THE HEBREW BIBLE II: PROPHECY AND POETRY/LECTURE, DISCUSSION**

See Jewish Studies 118.

**CMLT120 THE EPIC JOURNEY/LECTURE, DISCUSSION**

A comparative and cross-cultural examination of the epic as a recurring literary form. Special attention is paid to the various forms and functions of the hero's journey. Defines and articulates the various types of epic voyage and relates their differences and similarities to the values of the societies that gave rise to them. Included in the term's reading are selections (in English translation) from Homer's *Odyssey*, Vergil's *Aeneid*, Apollonius' *Argonautica* and Apuleius' *Ass*. Mr. Burke/Offered every other year

**CMLT129 SHOCK OF THE NEW: REVOLUTION IN HISPANIC CULTURE/FIRST-YEAR SEMINAR**

Explores the ways in which the arts (literature, cinema and painting) are both transformative and transformed by major changes in ideology, science and technology, psychology, and society at large. Shock and change also happen when cultures contact and collide. Examples of topics covered in this course could be: the birth of cinema, the influence of Marxism in figures like Che Guevara, Fidel Castro and Pablo

Neruda, Freud's influence in Dali and the surrealists, Frida Kahlo as a feminist icon, and Africa's influence on Picasso. Different topics and periods will be covered each semester. Taught in English. First year seminar. Crosslisted Comparative Literatures and Hispanic Studies. No prerequisites; restricted to first-year students. Ms. Atienza/Offered periodically

**CMLT130 THE NATIONAL IMAGINATION**

This course explores the concept of a national community as constructed and critiqued through literary and cinematic narratives, as well as other cultural texts. Special emphasis is given to the ways in which national languages have been used to promote the sense of cultural continuity and identity for various national communities. Variable content. This is a team-taught course with national focus changing depending upon the participation of particular members of the foreign languages faculty. Staff/Offered every spring

**CMLT132 SEXUALITY AND TEXTUALITY**

The course serves as an introduction to gay and lesbian studies and queer theory from the perspective of literature in an international and intercultural context. We will read ancient Greek texts, as well as literary works by authors such as Gide, Mann, Mishima and Puig and theoretical works by thinkers such as Foucault and Butler. The course asks both how the sexuality of a writer expresses itself in his or her writings, but also how rhetoric and language themselves inform sexuality in a variety of cultural contexts. Mr. Tobin/Offered periodically

**CMLT134 LATINO LITERATURE AND MEDIA ARTS**

See Spanish 134.

**CMLT136 EXISTENTIALISM IN PHILOSOPHY, LITERATURE AND THE HUMAN SCIENCES/LECTURE, DISCUSSION**

See Philosophy 135.

**CMLT150 JOURNEYS WITH HYPHENATED AMERICANS: EMERGING IDENTITIES, EVOLVING CULTURES/FIRST-YEAR SEMINAR**

The American "melting pot," once a national myth, has now become a cultural cliché often derided by contemporary ethnic communities. Forged largely around the migration of Europeans to the United States in the early 20th century, that fiction of national identity has since been rewritten and transformed through works that reflect the experiences of men and women who have come from non-European backgrounds: Native Americans, African Americans, Latinos, and Asian Americans. This seminar traces some of the shifts in these stories of migration in both fiction and film, in works ranging from the uplifting autobiographies of European immigrants at the beginning of the 20th century to Robert Rodriguez's irreverent Chicano movie, *Spy Kids*, at the century's end. In debunking the melting pot, writers and filmmakers have produced a highly imaginative and yet subversive counter-mythology that forces us to reconsider many of the commonplaces about American cultural identity. Fulfills the Verbal Expressions requirement. You must have been placed at the Verbal Expression level to select this seminar. Mr. D'Lugo/Offered periodically

**CMLT151 INTRODUCTION TO MEDIEVAL LITERATURE/LECTURE, DISCUSSION**

See English 150.

**CMLT155 STUDIES IN ITALIAN FILM: NEOREALISM/LECTURE, DISCUSSION**

Explores the political, cultural and aesthetic role of Neorealist cinema in Italy. The linkage of film, history and nationality during the years 1942-1951 leads to broader questions concerning the relations between art and politics in fascist, Resistenza and contemporary Italian

culture. In addition to film texts and selections from the critical debate over Neorealism in film and cultural history, we consider both precursors and inheritors of Neorealist cinema. Ms. Butzel/Offered every other year

**CMLT174 ISLANDS IN THE STREAM: PUERTO RICO AND THE FRENCH ANTILLES**

An examination of Hispanic and French cultures in the Caribbean, with a specific focus on Puerto Rico and the French Antilles. The course begins with an analysis of theoretical issues of colonialism, post-colonialism, and neocolonialism in the region, and follows with an exploration of specific issues such as assimilation, acculturation and alienation. The course then examines the notions of race, gender, language and nationhood through cultural production within and outside of the islands. Ms. Acosta Cruz and Ms. Ferly/Offered periodically.

**CMLT180 JAPANESE CULTURE AND LITERATURE IN TRANSLATION/LECTURE, DISCUSSION**

See Japanese 180.

**CMLT181 THE LITERATURE OF MODERN SPAIN IN TRANSLATION/LECTURE DISCUSSION**

Readings representing the major authors and trends in the literature of Spain in the 19th and 20th centuries. Emphasizes the realist novels of Galdós and Clarín in the 19th century; the philosophical novels of Unamuno and Pérez de Ayala, poetry and theater of Lorca and the postmodernist narratives of Goytisolo in the 20th century. Mr. D'Lugo/Offered periodically

**CMLT190 JAPANESE WOMEN WRITERS**

See Japanese 190.

**CMLT197 THE FAUST THEME IN LITERATURE AND MUSIC/LECTURE, DISCUSSION**

See German 197.

**CMLT205 THE PLAY AND ITS STAGES/SEMINAR, WORKSHOP**

A critical approach to the dramatic text based on historical and material conditions of performance. Considers the changing ways that meanings are made through styles and conventions of performance (including set, costume, mask and vocal delivery), which are specific to historical and cultural moments. Playwrights considered may include Sophocles, Shakespeare, Racine, Molière, Chekhov, Ibsen, Brecht, Genet and Beckett. Scene work. Mr. Spingler/Offered periodically

**CMLT206 LANGUAGES OF THEATER/SEMINAR, DISCUSSION**

A study of the way meanings are made in theater through structure and sign. Examines the function of nonverbal communication in theater, especially mask, gesture, movement and sound. Plays may include works of Euripides, Shakespeare, Cocteau, Apollinaire, Jarry, Genet and Pinter. Critical works read include Artaud's "The Theater and its Double," Brook's "The Empty Space" and Grotowski's "Towards a Poor Theater." Scene work. May be taken as a companion course to CMLT205. Mr. Spingler/Offered periodically

**CMLT208 HER STORY: HISTORY AND FICTION OF CARIBBEAN WOMEN WRITERS**

Traces the history of the Caribbean through contemporary women's writing from the Anglophone, Francophone and Hispanic areas. Examines the portrayal of Caribbean women from slavery and colonial times to the present day, and the depiction of women's participation in the construction of their past. Authors studied include Julia Alvarez, Maryse Condé, Edwidge Danticat, Jamaica Kincaid, Jean Rhys and Mayra Santos. Ms. Ferly/Offered every other year



**CMLT210 MODERNISM IN PHILOSOPHY, LITERATURE AND THE ARTS/LECTURE, DISCUSSION**

See Philosophy 210.

**CMLT248 STUDIES IN LATIN-AMERICAN CINEMA/ LECTURE, DISCUSSION**

See Spanish 248.

**CMLT250 MEDIEVAL LITERATURE/SEMINAR**

See English 250.

**CMLT254 STILL SPACES—EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR**

See English 254.

**CMLT256 NO MORE CLASSROOMS, NO MORE BOOKS: EDUCATION IN 20TH CENTURY FRENCH NOVEL AND FILM**

See FREN256 Taught in French. Prerequisite: 131 and another course at the 130 level or above in French, or permission. Ms. Gale/offered periodically

**CMLT264 WRITING AND IDENTITY IN THE FRANCOPHONE CARIBBEAN**

See French 264.

**CMLT288 ART OF THE CITY: PARIS AND NEW YORK/ DISCUSSION**

A comparative structural and cultural analysis of two urban designs, Haussmann's Paris and Olmsted's New York, the visual representation of the two cities and the literary interpretation of the cities. The cities will be considered as theaters in which cultural meanings are produced through spatial composition and performances in the set. Among the questions to be explored is the matter of cultural kinships and differences between France and the United States. Prerequisite: Permission of instructor. Mr. Spingler/Offered periodically

**ENG249 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR**

See English 249.

**ENG294 HISTORY OF THE ENGLISH LANGUAGE/ SEMINAR**

See English 294.

**FREN140 FRANCOPHONE LITERATURE AND FILM**

See French 140.

**FREN160 FRENCH CULTURE SEEN THROUGH FILM: JEAN RENOIR/LECTURE DISCUSSION**

See French 160.

**FREN211 SPIRITED REBELLION: ADOLESCENCE FRENCH NOVEL AND FILM/LECTURE, DISCUSSION**

See French 211.

**JS123 THE MIDRASHIC TRADITION/LECTURE, DISCUSSION**

See Jewish Studies 123.

**SCRN121 HISTORY OF INTERNATIONAL CINEMA UNTIL 1960**

See Screen Studies 121.

**SCRN288 GENDER AND FILM**

See Screen Studies 288.

**SPAN246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION**

See Spanish 246.

**SPAN249 STUDIES IN HISPANIC CINEMA/LECTURE**

See Spanish 249.

## COMPUTER SCIENCE

### Program Faculty

Frederic Green, Ph.D. - *Chair*

Jerry Breecher, Ph.D.

Li Han, Ph.D.

David Joyce, Ph.D.

Lawrence Morris, Ph.D.

Ping Xuan, Ph.D.

### Program Overview

The department views computer science as an academic discipline firmly rooted within Clark University's liberal-arts tradition, with an emphasis on the science of designing software and hardware. Courses emphasize concepts and principles; at the same time, the program closely follows ACM guidelines for university computer science. The major provides preparation for a variety of career paths, both inside and outside the academic community. Two courses in fundamentals of computer science and one course in discrete mathematics serve as general introductory courses. Four intermediate courses (core requirements) expose the principles of computer science. One year of calculus is required and should be completed as soon as possible, if at all possible by the end of the sophomore year. Beyond this, a series of elective courses is offered in which applications and advanced topics are explored. Further information, including expanded course descriptions, can be found on the department's Web site.

### Undergraduate Requirements

Students should note that CSCI110 Diving Into Research does not count towards the computer science major.

### Introductory Courses

These courses are prerequisites for the advanced courses and should be taken as soon as possible.

CSCI120 Introduction to Computing

CSCI121 Data Structures

MATH114 Discrete Mathematics

### Calculus

- One year of calculus.
- MATH 120, 121 Calculus I, II or MATH124, 125 Honors Calculus I, II.

This sequence should be complete as soon as possible; we recommend by the end of the sophomore year.

### Core Courses

CSCI140 Assembly Language and Computer Organization

CSCI160 Algorithms

CSCI170 Analysis of Programming Languages

CSCI180 Automata Theory

### Advanced Courses

Four courses in computer science at the 200 level, not including internships or reading courses except with departmental approval. (Total: 13 courses)

## Declaring a Major

The department has a system of advising to assist students with their course selections. Department faculty are eager to help students select courses. A major must be declared no later than the second semester of the sophomore year; earlier declarations are encouraged. Students should choose an academic adviser from the department faculty as early as possible or at least by the time the major is declared.

Entering students enrolled in first-year seminars in programs outside mathematics, computer science or the natural sciences are especially encouraged to make a prompt choice of an unofficial secondary adviser in the Computer Science Department, who will be able to supplement the advice offered by their primary adviser.

## Suggested Program Sequence

It is important to begin the computer science program early. An ideal program sequence begins with CSCI120 Introduction to Computing in the fall of the first year, followed by CSCI121 Data Structures and MATH114 Discrete Mathematics in the spring semester. A calculus sequence (MATH120, 121, or MATH124, 125) should be taken starting in the first year if possible, and in no case later than the second year. The four core courses should be taken as soon as possible.

The three mathematics courses required for the computer-science major are meant to ensure that all students will have the mathematical tools, which are indispensable for the study of computer science. MATH114 is a direct or indirect prerequisite for essentially all intermediate and advanced computer-science courses, and should be taken as early as possible by any student who may be interested in computer science. If it is not possible for a student to take both MATH114 and Calculus during the first year, preference should be given to MATH114.

## Reading Courses

Reading courses on special topics may be arranged with the permission of a member of the departmental faculty who will serve as supervisor. Departmental policy requires that a reading course can only be taken Pass/No Credit. Reading courses may not be substituted for 200-level courses to fulfill departmental requirements

## Bioinformatics for CSCI Majors

By taking a sequence of courses like CSCI120-121, CSCI160, CSCI210 (or CSCI 212), MATH 114, and appropriate biology courses, a CSCI major can add a Bioinformatics concentration.

## Honors Program

A major who maintains at least a 3.2 average (4.0 scale) in courses required for the major may apply for the departmental honors program. A student's application in writing must be directed to a prospective honors adviser or the department chair by the end of the student's junior year. Honors may be achieved in one of two ways: (1) a unified four-course sequence as a senior (some parts of which may consist of directed readings) followed by a comprehensive examination; or (2) an honors project to be presented at an oral defense or at a department seminar. This project may be an independent or joint research thesis, or it may be a programming project. Supporting course work may be required. Students interested in pursuing the honors program should consult their department adviser. The student registers for CSCI299, Sec. 8, for course credit for an honors thesis. Upon satisfactory completion of the program, the department may recommend graduation with honors, high honors or highest honors.

## Computer Science Minor

A minor in computer science consists of six courses: CSCI120-121 Computer Programming I and II, and four other courses in Computer Science (although MATH114 Discrete Mathematics may substitute for one), at least one of which is at the 200 level.

Here are some sample minors in computer science:

- Software sequence: CSCI120-121, MATH114, CSCI160, 170, and 250.
- Applications sequence 1 (Graphics and Robotics): CSCI120-121, MATH114, CSCI160, CSCI260, and CSCI265.
- Applications sequence 2 (Computer Architecture and Networking): CSCI120-121, MATH114, CSCI160, CSCI240, and CSCI280.
- Theory sequence: CSCI120-121, MATH114, CSCI160, CSCI180, and CSCI270.

## Courses

### CSCI099 COMPUTERS IN OUR WORLD/LECTURE, LABORATORY

An introduction to computer technology with an emphasis on social implications where applicable. Lectures will survey topics such as history of computer development from number-crunchers to information-management systems, how computers work, networking protocols including the Internet and World Wide Web. Additionally, the course will explore data representation and programming. Students will learn binary algebra and develop two or three short programs. A laboratory component will give students hands-on experience with software applications, which demonstrate the possibilities enabled by current computer technology. There are no prerequisites; no prior computer experience is necessary. Not applicable to the major requirements in computer science. Staff/Offered periodically

### CSCI110 DIVING INTO RESEARCH

For a number of years I've had an interest in programming microcontrollers to perform simple tasks. I've been using them as part of my teaching and in various other projects. One of our recent seniors used microcontrollers to oversee his honors projects. In our Diving into Research class we will learn how to program a microcontroller, as part of a simple circuit, and then build electronics that can be managed by the computer. This is the device we will be programming and teaching to do tasks. This will lead us to robotics, "intelligent devices", and a lot of other interesting topics. The purpose of this class is to have FUN. you should have an interest in computers and how they work. Together we'll do some simple programming so ideally you'll be taking CSCI 120 or equivalent. This is a 0.5 credit course each semester - the total course goes for a full year giving you 1.0 credit. Many people take CSCI 110 along with another First Year Seminar. Fulfills the Formal Analysis requirement.

### CSCI111 DIVING INTO COMPUTER SCIENCE RESEARCH/SEMINAR

See CSCI110.

### CSCI115 INTRODUCTION TO COMPUTING FOR SCIENTISTS

Computers are becoming an increasingly important aspect of the biological, physical and social sciences, whether we use them as part of an existing instrument, whether we're building new equipment, or whether we need to build new software. This course will talk about the limits of computing – what they can do and what they can't do. It will



explore how to program so that a student can build new applications of interest in a scientific field. The course will include a project, designed by the student, of use in her/his major. Previous experience in computing is not required, but it is expected that the student will have good logic and analysis skills. Preference will be given to first- and second-year students — upper-class students only by permission of the instructor. This course can be used as a prerequisite for CSCI121 or BINF101. It carries Formal Analysis credit. Staff/Offered periodically

#### **CSCI120 INTRODUCTION TO COMPUTING/LECTURE, LABORATORY**

An introduction to computer science, with a focus on the top-down approach to problem solving and computer programming in Java. Algorithms are developed for the solutions to stated problems, then translated into Java and tested on the computer. For the laboratory component, students are expected to write approximately seven programs throughout the course. Specific topics include decision making, logic design, iteration, arrays, and object-oriented design. Satisfies the formal-analysis requirement. No prerequisites. This course is a prerequisite for most higher-numbered computer-science courses. Although this course is continued in CSCI121, for many students it can stand on its own as a viable introduction to computer science. Mr. Green, Ms. Han, Mr. Joyce, Staff/Offered every semester

#### **CSCI121 DATA STRUCTURES/LECTURE, LABORATORY**

A continuation of CSCI120, with an emphasis on such topics as abstract data types, collections, and dynamic data structures such as linked lists, stacks, queues and binary trees. The usage and implementation of recursion is also discussed, as is the elementary analysis of algorithms. Approximately six programming projects are assigned as the laboratory component of the course. These projects entail the design and implementation of programs involving the topics mentioned above. Prerequisite: CSCI120. Mr. Green, Ms. Han, Mr. Xuan/Offered every semester

#### **CSCI124 HONORS INTRODUCTION TO COMPUTING**

This is an enriched introduction to the principles of computer science for students with a strong interest and/or background in computing. Much like the regular introductory course CSCI120, the focus is on the top-down approach to problem solving and computer programming in Java, including the usual topics such as control structures, arrays, and object-oriented design. However it delves more deeply into a number of topics of central interest in computer science, including a more extensive study of algorithms and the nature of information. Graphics programming and animation are introduced via the programming language Processing, which is closely related to Java. Graphical applications are used to motivate and introduce some important programming ideas (graphical user interfaces, inheritance, polymorphism, recursion) as well as foundational concepts in computer science such as abstract models of computation (Turing machines and cellular automata). While the course has no formal prerequisite, some background in computing, such as prior study of computer programming, is highly recommended. This course is a prerequisite for most higher-numbered computer science courses, and serves as an alternative prerequisite to CSCI121. Mr. Green/Offered every fall.

#### **CSCI140 ASSEMBLY LANGUAGE AND COMPUTER ORGANIZATION/ LECTURE, LABORATORY**

Covers fundamentals of assembly language programming such as data representation, the instruction set, addressing mode, macros, procedures, input and output facilities, assembler and linker, introduction to logic circuits and the basic machine organization of conventional com-

puters. The goal is to understand how a computer performs various tasks that are completely hidden from the user in a high-level language. For the laboratory component, students will write several programs in assembly language. Prerequisites for this course require a grade of C or better. Prerequisite: CSCI121. Mr. Breecher/Offered every year

#### **CSCI160 ALGORITHMS/LECTURE, DISCUSSION, LABORATORY**

Emphasizes how the design of algorithms is supported by advanced data structures such as sets, trees, and graphs. Applications to searching and sorting are discussed. Topics include: design and analysis of algorithms, general trees, balanced trees, priority queues, hash tables, merge-sort, quick-sort, radix sorting and searching, and elementary graph algorithms. Programming projects are assigned for the laboratory component. Prerequisites for this course require a grade of C or better. Prerequisites: CSCI121 and MATH114. Mr. Green, Ms. Han/Offered every year

#### **CSCI170 ANALYSIS OF PROGRAMMING LANGUAGES/LECTURE**

Deals with the issues of the design and implementation of programming languages from both the syntactic and the semantic point of view. Topics include: the representation of rules of syntax, using context-free grammars, parsing, semantic constructs, control structures, implementation of procedures and parameters, implementation of recursion and an introduction to the organization of compilers. A typical group term project may be to design and implement a compiler or interpreter for the actual implementation of some language. Prerequisites for this course require a grade of C or better. Prerequisites: CSCI121 and MATH114. Mr. Xuan, Mr. Green/Offered every year

#### **CSCI180 AUTOMATA THEORY/LECTURE, DISCUSSION**

Studies the abstract models of machines and languages recognized by them and introduces the concept of computability. Begins with a review of sets, functions and relations, and then continues with finite automata and regular languages, pushdown automata and context-free grammars, grammar transformations and normal forms, and finally the mathematical model of modern computers: Turing machines and computable functions. Some examples of unsolvable problems, such as the halting problem, will be discussed. Involves a fourth-hour problem-solving session. Prerequisites for this course require a grade of C or better. Prerequisites: CSCI121 and MATH114. Mr. Green, Ms. Han, Mr. Joyce/Offered every year

#### **CSCI201 PROSEMINAR IN COMPUTER SCIENCE/SEMINAR**

The presentation of topics in computer science by and for senior undergraduates. These presentations acquaint students with diverse subjects, introduce them to researching known topics and give them practice in presenting material to their peers. Faculty members will also present some research topics. Possible areas the topics may be drawn from might include robotics, networking, NP complete problems, neural networks, expert systems, parallel algorithms. Prerequisites for this course require a grade of C- or better. Prerequisites: CSCI160 and CSCI170. Staff/Offered periodically

#### **CSCI210 ARTIFICIAL INTELLIGENCE/ LECTURE, LABORATORY**

Focuses on the fundamental ideas of artificial intelligence and programming in Lisp. Topics included are knowledge representation schemes, problem representation through explicit models, search techniques, analogy and pattern recognition, natural language parsing and

planning. Students implement the above ideas through computer programs written in Lisp. Language instruction is provided in Lisp (or Prolog), although no prior knowledge of these programming languages is assumed. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI160. Mr. Xuan/Offered every year

#### **CSCI215 OPERATING SYSTEMS/ LECTURE, LABORATORY**

Studies the structure, performance and design of operating systems. Topics include concurrency, deadlocks, scheduling and memory management. Various operating systems may be examined and compared. Students will design and implement parts of operating systems. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI160. Mr. Breecher, Mr. Green/Offered every other year

#### **CSCI220 DATABASE MANAGEMENT AND SYSTEMS DESIGN/LECTURE**

An advanced course on the realities of database technology. Emphasizes the goals of database management: performance, data integrity, future compatibility and versatility. The concept of the data model is examined and a specific database is discussed. Concentrates on database design and specification. Prerequisite: CSCI160. Mr. Xuan/Offered every other year

#### **CSCI230 COMPILER DESIGN/LECTURE, LABORATORY**

A continuation of CSCI180 Automata Theory. It uses the automata and grammars introduced in CSCI180 to design translators (compilers) for programming languages. Topics include lexical analysis, top-down parsing, bottom-up parsing, syntax-directed translation, type checking, run-time environment, code generation and an introduction to code optimization. A typical term project is to write a compiler for a simple programming language such as a subset of C or Pascal. Prerequisites for this course require a grade of C- or better. Prerequisites: CSCI160 and CSCI180. Mr. Green/Offered every other year

#### **CSCI240 COMPUTER ARCHITECTURE/LECTURE**

A study of the design of computers. Topics include the design of combinatorial and sequential circuits, design methodology of a basic computer, central processor organization, microprogramming, memory organization, input-output organization and arithmetic processor design. As time permits, further topics, such as vector and parallel processing, are discussed. A functional, logical (theoretical) approach is adopted. PHYS219 Electronics Laboratory is recommended so that students gain hands-on experience with computer chips. The science of design is stressed together with the existing machines. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI140. Mr. Breecher/Offered every other year

#### **CSCI250 SOFTWARE ENGINEERING/SEMINAR**

Students consider the life cycle of large software projects, beginning with the elicitation and definition of users' requirements and continuing through software design, documentation, coding, testing and maintenance. Topics include: modularity, coupling, cohesion, transformational and transactional structures and testing strategies. Working in teams, students gain practical experience developing software to solve concrete problems. Prerequisites for this course require a grade of C- or better. Prerequisites: CSCI160 and CSCI170. Mr. Breecher, Ms. Han, Mr. Xuan/Offered periodically

#### **CSCI260 COMPUTER GRAPHICS**

This course provides an introduction to computer graphics with an emphasis on the underlying theory and on the use of the graphics library OpenGL as application programming interface (API). We will study the theoretical foundations and algorithmic issues in class and will learn and use OpenGL as the particular API for writing graphics programs in programming assignments. Prerequisites for this course require a grade of C- or better. Prerequisites: Data Structures and Algorithms (CSCI160) and familiarity with matrix algebra (MATH130), or instructor's permission. Ms. Han/Offered every other year

#### **CSCI265 ROBOTICS /LECTURE, LABORATORY**

This course presents an introduction to robotics. In addition to algorithmic issues, the course will cover related engineering and system topics and discuss current research problems. Topics covered include hierarchical paradigms, biological foundations, robot actuators and sensors, sensing techniques, kinematics, and dynamics, control, localization and motion planning. Students will get hands on experience through computer simulation or physical experiments with robot project-component kits. Prerequisites for this course require a grade of C- or better. Students should be interested in geometric concepts and algorithms and have good programming skills. Prerequisites: Algorithms (CSCI160) and familiarity with matrix algebra (MATH130), or instructor's permission. Ms. Han/Offered every other year

#### **CSCI270 THEORY OF COMPUTATION/LECTURE**

Studies the nature and formal models of computation (by computers), its power and limitation (computability versus uncomputability), the computational complexity of various problems and the applications in logic and computer science. Turing machines, general recursive functions and other standard models of computation are introduced. Other aspects of recursion theory, such as unsolvable problems and recursively enumerable languages, are introduced. We also address the more practical question, "What is an efficient program?" in an introduction to modern complexity theory. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI180. Mr. Green/Offered every other year

#### **CSCI280 COMPUTER NETWORKS/LECTURE, LABORATORY**

Provides an introduction to the theory and practice of the design of computer and communications networks. The TCP/IP Model will be used as the framework with the course progressing through the physical, data link, network and transport layers. Analysis of network topologies and protocols, including performance analysis, is treated. Current network types including local-area and wide-area networks are introduced, as are evolving network topologies. Laboratory exercises include the design and implementation of projects such as simulation of the network/transport layer functions, routing, congestion control, an Ethernet controller, applications using TCP/IP or remote procedure calls. There may be extensive network programming assignments. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI160. Mr. Breecher/Offered every other year



## ECONOMICS

### Program Faculty

Wayne Gray, Ph.D. - *Chair*

Sang Hoo Bae, Ph.D.

Madhavi Bokil, Ph.D.

John Brown, Ph.D.

Myles Callan, Ph.D.

Jacqueline Geoghegan, Ph.D.

Chang Hong, Ph.D.

Amy Ickowitz, Ph.D.

Robert Johnston, Ph.D.

Maurice Weinrobe, Ph.D.

Junfu Zhang, Ph.D.

### Research Faculty

Daniel Bernhofen, Ph.D.

Attiat Ott, Ph.D.

### Emeriti Faculty

Howard W. Nicholson, Ph.D.

Frank Puffer, Ph.D.

Roger C. Van Tassel, Ph.D.

Emiel C. Veendorp, Ph.D.

### Program Overview

Economics offers a flexible yet consistent framework for understanding key issues facing the economy and society—from globalization of international trade and finance to global warming. The major and minor in economics offer students an opportunity to learn the key elements of this framework and provide them with ample opportunities to apply it to a wide range of key economic issues. The Ph.D. program enriches the intellectual community in economics with opportunities for undergraduates to take advanced courses not typically available to undergraduate majors.

Since it first attempted to explain the growth and wealth of nations more than two hundred years ago, economics has evolved into a modern social science that combines a coherent analytical framework with careful analysis of information to understand how economies work and develop, and the consequences of economic policies and policy change. It applies the basic logic of individual choice and market forces to explore the tradeoffs inherent in addressing many of the key concerns on today's agenda: ensuring rising living standards in developed and developing countries, assessing the impacts of international trade, and identifying the wisest use of scarce environmental resources, among many others.

The major in economics builds on the expertise the student develops in the introductory courses. It combines a solid background in the core of economic analysis with a wide range of applied courses that investigate fields of economics and important topics. The capstone experience, honors program, internships and study abroad offer opportunities for majors to acquire research experience, apply economics in government or business and deepen their understanding of economic issues.

The economics major provides skills that are highly valued in a number of careers and graduate programs. The economics major emphasizes developing skills of careful thinking and analysis in combination with the application of those skills in practical settings. Law schools welcome the background economics provides in logical think-

ing. Government agencies and graduate programs in public policy or economics appreciate the systematic approach to understanding the economy offered by economics. Business schools and businesses find the facility the economics major acquires in analytical thinking and quantitative methods of analysis attractive.

### Undergraduate Requirements

The requirements for the major include 13 courses: five required core courses in quantitative methods and economic theory; five elective courses in economics; and three related courses in fields outside of economics (one of which is to be in mathematics). A course including a capstone experience must be taken during the senior year. Majors must have a grade-point average of 2.0 for the 10 required economics courses, and a grade of no lower than C- in the five core courses.

Upon declaring the major, students also choose an adviser from among the economics faculty. Students are encouraged to use their initial meetings with their adviser to develop a program that meets their interests and goals. For example, a student concerned about environmental change and developing countries may combine course work in Environmental Economics (ECON157 or ECON257) with Population Economics (ECON247) and Economic Development (ECON128 or ECON 228). Students planning on graduate work in economics should consult their adviser early on. Graduate work in economics demands strong mathematical skills, including calculus and other courses in math.

The Undergraduate Economics Handbook provides many detailed suggestions on how students can tailor their major to their interests and career goals including a worksheet for planning the program in the major.

### Core Courses

The five core courses provide students with a common language and a common set of skills that ensure preparation for study of the subfields of economics in the elective courses. They also enhance the student's understanding of economic analysis. ECON010 provides an introduction to the economic way of thinking using a comparative approach. First-year students may elect a first-year seminar (ECON100) that provides an in-depth look into key economic issues, such as international economic relations or population, in place of ECON010. Either of these courses is the prerequisite for all 100-level courses and ECON011. ECON011 provides an overview of the key analytical tools of economics and is the prerequisite for 200-level courses.

Courses in intermediate microeconomics (ECON205) and intermediate macroeconomics (ECON206) deepen the major's understanding of the economic analysis of individual and firm choices, markets, and the economy as a whole. Course work in statistical analysis (ECON160) acquaints students with how information can be used to confront hypotheses suggested by basic economic analysis. A minimum grade of C- must be earned in each of the required core courses.

### Economics Electives

The five economics electives and the three related courses provide the student with the opportunity to pursue more focused interests within the major. Courses at the 100-level, generally provide students with an in-depth look at economic institutions and policies. Courses at the 200 level, which require completion of ECON011, provide a more comprehensive introduction to the economic literature of an area. Economics majors are required to take at least three of their electives at the 200 level.

Elective offerings include such fields as international trade and finance, economic development, monetary economics and labor, as well as topical courses in areas such as environmental economics, the economics of population, economic history and the economics of sport.

Students are encouraged to group their electives around their own particular interests. Brochures available from the department provide detailed suggestions on the appropriate economics electives and related courses for students with interests in international economics, development and the environment.

### Related Courses

Economics majors must complete three courses that are offered outside of the economics department, which are related to the goals of the economics major. Some courses that will satisfy the related course requirement include management courses in accounting, finance, management and information systems (MIS) and operations management, computer-science courses, some courses in economic geography, and mathematics above the level of introductory calculus.

Other courses can meet this requirement provided they complement the program a student has developed. For example, many courses in international development would provide background for a student who has taken Economic Development (ECON128 or ECON228), or a student with an interest in economic policy may want to take additional courses in government. The departmental faculty adviser can provide suggestions for related courses of this type.

At least one mathematics course at the level of pre-calculus (MATH119) or calculus (MATH120 or 124) is required. Calculus is recommended for all majors.

### Capstone

A capstone course, taken during the student's senior year is required. This offers an opportunity to draw upon the skills and background acquired during the previous years of study. The capstone courses allow students to acquire in-depth knowledge of a topic of interest using a combination of economic analysis and empirical research. The capstone course counts as one of the five economics electives.

There are three ways of meeting the capstone requirement:

- a) Participation in the honors program (see below)
- b) 200-level economics research course.
- c) Independent study course. For students unable to meet the capstone requirement through (a) or (b), arrangements can be made for individually directed research work.

Students must submit the capstone declaration form with the instructor's signature to the Economics Department when enrolling in a course that they have designated as their capstone.

### Honors Program

Economics majors with outstanding academic records (a GPA of 3.4 in economics courses, 3.0 overall) may apply to pursue departmental honors. To receive departmental honors, a student must successfully complete an honors thesis. Prospective candidates for honors should develop a proposal for the thesis and identify a faculty supervisor during the second semester of the junior year. During the fall of the senior year, the students will enroll in ECON297 Honors. The student then writes a thesis under the direction of a faculty supervisor. During the spring of the senior year the thesis is evaluated by the department for possible departmental honors.

### Economics Minor

Students majoring in another discipline often discover that a minor in economics can provide a background that can complement their major and allow them to explore an interest in economics. The minor requires a minimum of six courses in economics including ECON010 and ECON011. Two of the remaining courses must be at the 200 level. Only courses with a final grade of C- or better will be counted toward the minor.

### Graduate Program

Clark University offers a unique program of graduate study and research leading to the doctor of philosophy in economics. The economics faculty provides students with an excellent opportunity for qualified students to develop proficiency in economic theory, econometrics and their chosen fields of specialization. The design of the Ph.D. program emphasizes that students acquire experience carrying out independent research. The collegial size of the program ensures students ample opportunities to work with faculty.

### Requirements

The requirements for the Ph.D. include a core of four courses in economic theory and three in mathematical economics and econometrics; qualifying examinations in microeconomic and macroeconomic theory; completion of two fields of the student's choice; completion of two elective courses; and the dissertation. Where appropriate, graduate students may elect to take a limited amount of work in related courses offered by other departments. At least two full academic years of graduate work or the equivalent in part-time work in residence at Clark are required. Some teaching and research experience at Clark, or other such teaching and research as the department may regard as equivalent, is strongly encouraged.

Ph.D. students can satisfy the requirements for econometrics and mathematical economics by passing designated courses offered in the department, or in the case of prior preparation, by passing a test given by the department. The student meets the economic theory requirement by satisfactory completion of the theory courses ECON301, 302, 303 and 304, and by passing two qualifying examinations, one each in microeconomic theory and macroeconomic theory.

Field courses begin in the second year, and are completed by the end of the third year. Each field consists of two to three semesters of course work. A student must designate a major field of specialization, in which a field paper is written and subsequently presented in the department seminar series, as well as completing a minor field of specialization. The Clark program regularly offers specialization in four fields, usually with two fields offered each academic year: international economics (ECON307, ECON308), applied econometrics (ECON366a/b), development economics (ECON328, 329) and applied spatial analysis (ECON357, ECON377 and ECON359). Other fields are occasionally offered and it is possible to combine related courses into a field, subject to the approval of the Director of Graduate Studies. Students must take both the major field and the minor field within the Economics Department. Successful completion of each field requires a passing grade (minimum of B-) in all field courses and completion of any other requirements designated by the professor responsible for the field. The topic for the field paper is to be determined with the approval of the professor responsible for the major field, and the completed field paper must be presented in the department seminar series within the following academic year.



The Ph.D. also requires one to two elective courses, which may be completed outside of economics. Elective courses within economics may be either stand-alone electives or be taken from an Economics Department field-course sequence that a student is not declaring as either a major field or minor field. Elective courses taken outside the Economics Department should be chosen to complement the major and minor fields. Elective courses taken outside of the department require prior approval of the director of Graduate Studies.

Preparation for writing the dissertation begins during the third year, when the student starts writing the dissertation prospectus. The prospectus lays out the intellectual motivation for the dissertation and the research plan designed to complete it. The prospectus is to be approved by the faculty adviser, who then becomes the chairperson of the dissertation committee. The dissertation committee consists of three professors, who can be either from the Economics Department, or other departments at Clark or other universities, with the approval of the faculty adviser. The faculty adviser approves the distribution of the dissertation prospectus to the dissertation committee. Upon approval of the committee, the dissertation prospectus is subsequently defended in an open presentation to the dissertation committee and other interested members of the community. The dissertation must be an original contribution to knowledge that is based upon independent research, convincingly presented and acceptably written.

Upon completion of the dissertation in a form acceptable to the committee, the candidate makes a copy of the dissertation available to the department, the faculty and the graduate students for two weeks prior to the dissertation defense. The defense is presented in an open presentation to the dissertation committee and other interested members of the community. Final approval of the dissertation is granted by the committee after consideration of any suggested changes or questions arising from the seminar. The dissertation must be completed within five years of passage of the preliminary examinations. If it is not, the student must successfully retake the preliminary examinations in economic theory before defending the dissertation. Under certain circumstances, published articles may be accepted by the department instead of a dissertation.

Students enrolled in the Ph.D. program may be awarded the M.A. degree upon satisfactory completion of twelve credits and the qualifying exams. In the case of students who do not continue toward the Ph.D., on recommendation of the Director of Graduate Studies, the M.A. may be awarded upon satisfactory completion with a passing grade of twelve courses (including all required first year courses) with a minimum grade point average of 3.0. A student should discuss program plans with the graduate student adviser before registration day and secure approval of the course program.

Scholarship assistance for students admitted to the Ph.D. program is available. Full or partial tuition remission may be granted to particularly well-prepared students. In addition, several teaching assistantships are awarded, enabling graduate students to gain experience in undergraduate instruction. These cover remission of tuition and a cash stipend. Employment as a research assistant is also available for some well-qualified students. The number of RAs is dependant on the availability of funding from external grants.

## Courses

### **ECON010 ECONOMICS AND THE WORLD ECONOMY/LECTURE, DISCUSSION**

This course introduces the vital contribution economics can make to an understanding of how society operates by comparing the methods used for resource allocation in different economic systems. The course develops basic economic concepts through comparisons across countries, over time, and for different goods, rather than by emphasizing economic theory. These economic concepts are then applied to a variety of important current policy issues. Fulfills the global comparative perspective. Staff/Offered every semester

### **ECON011 PRINCIPLES OF ECONOMICS/LECTURE, DISCUSSION**

This course is an introduction to the analysis of the economy using economic models. The first part of the course studies microeconomics - how individual actors in the economy, both consumers and producers, make economic decisions. The course then examines the implications of those microeconomic decisions for social welfare. Finally, in the last part of the class we will discuss issues of economic growth, business cycles, unemployment, and inflation that form the core of macroeconomics. Building on the basic principles of economics, we develop a framework for understanding the role of monetary and fiscal policies in affecting the economy. Open to first-year students. Prerequisite: ECON010 or 100. Staff/Offered every semester

### **ECON100 ECONOMICS OF ENVIRONMENTAL REGULATION**

The department of economics regularly offers a first-year seminar. For the Fall 2008 semester the subject of the seminar is the Economics of Environmental Regulation. This course uses basic economic tools to consider a variety of environmental problems, ranging from resource issues (water rights, over-fishing, agricultural policy) to pollution problems (conventional air and water pollution, toxic pollutants, global warming). Our approach to each topic will begin with an analysis of the problem based on economic theory, trying to define the optimal solution(s) to the problem, as well as predicting what barriers will stand in the way of reaching that optimum. We will then examine how the problem has (or hasn't) been solved in different countries, and compare those practical outcomes with the predictions of economic theory. Since no economics background is required, the course begins with an introduction to basic economic tools such as the theory of supply and demand, and benefit-cost analysis. ECON100 is a substitute for ECON010. Fulfills the Global Perspective requirement. Mr. Gray/First-Year Seminar

### **ECON108 INTERNATIONAL ECONOMICS: TRADE AND FINANCE/LECTURE, DISCUSSION**

Reviews the basic principles of international economics. Examines policy issues in international trade and foreign investment, and explores policy alternatives. Not a prerequisite for ECON207 or 208, but may be taken in preparation for them. Prerequisite: ECON010 or 100. Staff/Offered every year

### **ECON113 MONETARY ECONOMICS: THEORY AND POLICY/LECTURE, DISCUSSION**

Monetary economics investigates the structure of the financial system, the institutions and customs of that system and the role of money in the economy. The macroeconomics of money and the role of the Federal Reserve (and other central banks) are studied. Prerequisite: ECON010 or 100. Mr. Weinrobe/Offered every year

**ECON125 HEALTH ECONOMICS/LECTURE, DISCUSSION**

Examines the economic processes and activities of health-care systems and institutions. Major issues including competition, role of governments and insurance are among the topics that are investigated to assist students in understanding how economic considerations affect the delivery of care. Prerequisite: ECON010 or 100. Staff/Offered periodically

**ECON126 PUBLIC POLICY TOWARD BUSINESS/LECTURE, DISCUSSION**

Examines the various types of industrial organization, the degrees of monopoly in competition, and the development of public policies that affect business. Among issues traced are the development of antimonopoly regulation, consumer protection and public utilities. Business performance and government regulations are related to criteria from economic theory. Prerequisite: ECON010 or 100. Staff/Offered periodically

**ECON128 INTRO TO ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION**

This course is an introduction to development economics. Students examine the major theories of economic development, the major problems confronting less developed countries, and the policies and strategies appropriate for economic development. Some of the topics discussed include: Poverty and inequality, education and health, the relationship between population and development, international trade, and sustainable development. Offered in alternate years with ECON228. Students may not take both ECON128 and ECON228. Prerequisite: ECON010 or ECON100. Ms. Ickowitz/Offered every other year

**ECON157 THE ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT/LECTURE**

A review of political economic problems associated with such natural resources as land, water and energy goods, as well as a resource common to all of us, our natural environment. Topics include the assessment of environmental impacts within market-oriented economics and the use of economics in policy designed to address environmental issues such as air pollution, global warming, biodiversity and suburban sprawl. Students may not take both ECON157 and ECON257. Prerequisite: ECON010 or 100. Ms. Geoghegan/Offered periodically

**ECON160 INTRODUCTION TO STATISTICAL ANALYSIS/LECTURE, DISCUSSION**

Examines basic concepts and techniques of statistical method in economic analysis: descriptive statistics, probability theory, sampling distributions, hypothesis testing and simple and multiple regression. Prerequisite: ECON010 or ECON100. Staff/Offered every semester

**ECON205 MICROECONOMIC THEORY/LECTURE, DISCUSSION**

Describes and analyzes how a market-oriented economy functions in answering the five basic economic questions: (a) What commodities to produce? (b) How much of each to produce? (c) What productive techniques to use and how to provide incentives? (d) How to distribute the output among the various members of society? (e) What provision to make for the future? Interspersed with theory, the course contains frequent examples that demonstrate the use of microeconomics in solving problems faced by decision makers in both the private and public sectors. Prerequisite: ECON011. Ms. Geoghegan, Mr. Zhang, Mr. Bae/Offered every year

**ECON206 MACROECONOMIC THEORY/LECTURE, DISCUSSION**

Macroeconomics is one of the core elements of economics. The subject includes the study of the determinants and behavior of the aggregate economy, including income, employment and the price level. The economy is examined at a point in time (statics) as well as over time

(dynamics). Prerequisite: ECON011. Mr. Weinrobe, Mr. Callan, Ms. Bokil/Offered every year

**ECON207 INTERNATIONAL TRADE THEORY/LECTURE, DISCUSSION**

Studies international trade theory and policy at the intermediate level. Examines the fundamentals of international trade theory: comparative advantage, gains from trade, neoclassical trade theory, trade and income distribution. Traditional and modern instruments of protectionism, arguments for and against free trade and the role of international institutions are discussed. Prerequisite: ECON011; ECON205 is recommended. Ms. Bokil/Offered every year

**ECON208 INTERNATIONAL FINANCE/ LECTURE, DISCUSSION**

International macroeconomics at the intermediate level. The fundamentals of international finance are studied: operations of international currency markets, the concept of the balance of payments and fixed versus flexible exchange-rate regimes. Analyzes macroeconomic policies under different exchange-rate regimes; theories of exchange-rate determination and the working of different international monetary regimes. Prerequisite: ECON011; 206 is recommended. Ms. Bokil/Offered periodically

**ECON222 LABOR/LECTURE, DISCUSSION**

Applies the concepts of labor supply and labor demand in a basic model of labor markets. The model is used to analyze the results of the labor market: wages, employment and unemployment. The analysis is modified to allow for market imperfections and nonmarket forces, including trade unions and the government. Further topics include wage discrimination and income inequality. Prerequisite: ECON011. Mr. Gray/Offered every other year

**ECON224 APPLIED GAME THEORY/LECTURE, DISCUSSION**

Game theory is the formal study of situations in which individuals make decisions that will influence one another's welfare. It provides a set of analytical tools that are useful for scholars in all branches of social sciences as well as for practical decision-makers. This course offers an introduction to game theory with an emphasis on its applications. It covers applications in economics, business, political science, sociology, international relations, psychology, biology, and recreation. No prior knowledge of game theory is presumed and the required mathematical background is minimal (high school algebra and one course in calculus will be sufficient). Prerequisite: Math120 or Math124 or instructor's permission. Mr. Zhang/Offered periodically

**ECON226 INDUSTRIAL ORGANIZATION/LECTURE, DISCUSSION**

Takes the concepts learned in Intermediate Microeconomic Theory to the next level. More complicated theories of firm behavior are examined. By allowing issues such as product differentiation and imperfect knowledge to enter the analysis, students gain access to more realistic views of industrial structure and performance. Practical applications of these theories can then be examined through the use of specific industry studies. Prerequisite: ECON011. Mr. Bae/Offered periodically

**ECON228 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION**

Examines the major theories of economic development, the major problems confronting less developed countries, and the policies and strategies appropriate for economic development. Topics include agricultural development, income distribution, industrialization strategies, foreign aid and investment, population, labor and employment. This course is more rigorous than ECON128 and presumes a stronger background in economics. Students may not take both ECON128 and ECON228. Offered in alternate years with ECON128. Prerequisite: ECON011. Ms. Ickowitz/Offered every other year



**ECON243 AMERICAN ECONOMIC HISTORY/LECTURE, DISCUSSION**

Offers a comprehensive survey of the development of the United States economy from a colonial backwater to a leading industrial power. It emphasizes the use of economic reasoning to understand historical controversies such as the struggle over slavery, the causes of the Great Depression, discrimination in labor markets, and the rise of the American export economy. Fulfills Historical Perspective. Prerequisite: ECON011. Mr. Brown/Offered periodically

**ECON244 EUROPEAN ECONOMY: EAST AND WEST/ LECTURE, DISCUSSION**

Offers a critical examination of European approaches to economic policy. In the West, these include the modern welfare state (widely available health care and housing), a more heavily regulated labor market, and moves toward a common market and currency. In the East, governments relied upon central planning and state ownership, even scoring some initial successes. Blending the tools of economic analysis with a close look at policies, this course will offer answers to these questions and an introduction to the economic challenges facing Western and Eastern Europe in the aftermath of the revolutions of 1989. Prerequisite: ECON011. Mr. Brown/Offered every other year

**ECON245 THE HISTORY OF GLOBAL ECONOMY/LECTURE, DISCUSSION**

Provides students with a comprehensive introduction to the history of the global economy. Using straightforward tools of economic analysis, we study the debate over the origins of the global economy, the growth of it before World War I, its destruction during the Great Depression, and its re-emergence during the past 50 years. The course focuses on the potential impacts of globalization on economic growth, the distribution of benefits (and costs) and the role played by colonialism and imperialism. Fulfills the Historical Perspective. Prerequisites: ECON011. ECON108 or ECON208 recommended. Mr. Brown/Offered every other year

**ECON246 LATIN AMERICA AND THE WORLD ECONOMY/LECTURE, DISCUSSION**

This course explores the past 150 years of Latin American economic development. An important theme is understanding the roles of both domestic and international influences on Latin American development. The course begins with a consideration of colonial legacies. It then turns to the incorporation of many Latin American economies into the international economy by 1900 and the dramatic turn towards isolation with the adoption of import substitution policies during the 1940s and 1950s. It concludes with an assessment of the adoption of domestic and international reform during the 1980s and 1990s. Along the way, comparisons with Asia and North America will help to assess the pattern of Latin American development. Prerequisite: ECON011. Mr. Brown

**ECON247 ECONOMICS OF POPULATION/LECTURE, DISCUSSION**

The economics of population, economic demography, is the analysis of the economic forces that influence population and the demographic factors that affect traditional economic variables. The subject has strong ties to the economics of development, labor, health and macroeconomics, as well as to other disciplines of the social sciences. Prerequisite: ECON011. Mr. Weinrobe/Offered every other year

**ECON250 ECONOMICS OF SPORT/LECTURE, DISCUSSION**

Applies economic analysis to the sports industry. While the primary focus is on professional team sports, individual and amateur sports are covered as well. Labor relations, antitrust law, public subsidization of sports facilities, discrimination and sports broadcasting are among the

topics that are covered from an economics perspective. Prerequisite: ECON011. Staff/ Offered periodically

**ECON257 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS/LECTURE, DISCUSSION**

Examines some of the issues associated with the economics of natural resources and the environment. Topics discussed, at both the theoretical and empirical level, are chosen from the following: the theory and analysis of renewable and nonrenewable resources, resource scarcity and the economy, sustainable development and the measurement of the benefits and costs of environmental regulation. Proper policies are discussed to encourage resource conservation, the problems of common property resources and the use of economic incentives to internalize environmental externalities. Students may not take both ECON157 and ECON257. Prerequisite: ECON011 (LAS 256) Ms. Geoghegan/Offered periodically

**ECON260 PROBABILITY AND STATISTICS/LECTURE**

See Mathematics 217.

**ECON265 ECONOMETRICS/LECTURE, DISCUSSION**

This course deals with the application of statistical methods to economics. The objective is to expose students to economic model building, testing the model statistically, and applying the model to practical problems in forecasting and analysis. By understanding the theoretical and econometric basis of equations, students gain proficiency in formulating, estimating and interpreting testable relationships on their own. Prerequisite: ECON011 and 160. Staff/Offered periodically

**ECON271 INTRODUCTION TO MATHEMATICAL ECONOMICS/LECTURE, DISCUSSION**

An introductory survey of the use of mathematical methods in economic analysis. Topics include elements of linear algebra, optimization and differential equations. Prerequisite: ECON011 and one of the following math classes: MATH119, 120, or 124. Staff/Offered every year

**ECON273 FORECASTING/LECTURE, DISCUSSION**

Investigates a number of forecasting techniques commonly used in economic analysis. Among the techniques covered are time series analysis, econometric models, simulation models and expectations surveys. Prerequisites: ECON011 and 160 or equivalent. Mr. Callan/Offered periodically

**ECON277 URBAN ECONOMICS/LECTURE, DISCUSSION**

Urban economies provide most of the employment in the developed world and the most dynamic sector of developing economies. Cities are also home to a growing share of the world's residents. This course offers an overview of two key dimensions of the economies of urban areas: the process of agglomeration and the forces shaping where people live and work. The course applies theoretical insights from urban economics to questions facing urban areas, including the question of crime, housing, urban sprawl, and spatial segregation by race and income. Our discussion draws upon examples from Beijing to Berlin to Worcester. Prerequisite: ECON011. Mr. Brown, Mr. Zhang/Offered every year

**ECON297 HONORS**

Students work on an individual basis with a faculty member on an intensive piece of research, culminating in an honors thesis. A student desiring departmental honors must register for one semester of ECON297 in the fall of the senior year. Required for departmental honors. Prerequisite: permission of instructor. Staff/Offered every year

**ECON298 INTERNSHIP**

Students spend a semester working full or part time outside the University as part of their academic experience. To qualify, the internship experience must significantly involve an extension, embodiment or illustration of previous or concurrent, systematic academic work in economics. Offered for variable credit. This course does not count toward the economics major. Staff/Offered every year

**ECON299 INDEPENDENT STUDY**

Offered for variable credit. Staff/Offered every year

**ECON301 MICROECONOMICS-FOUNDATIONS**

Mr. Zhang/Offered every year

**ECON302 MICROECONOMICS-TOPICS**

Prerequisite: ECON301 Mr. Bae/Offered every year

**ECON303 MACROECONOMICS I**

Prerequisite: ECON301 Ms. Bokil/Offered every year

**ECON304 MACROECONOMICS II**

Prerequisite: ECON303 Mr. Callan/Offered every year

**ECON307 INTERNATIONAL ECONOMICS**

Prerequisite: ECON302 Ms. Hong

**ECON308 OPEN ECONOMY MACROECONOMICS**

Prerequisite: ECON303 Ms. Bokil

**ECON322 LABOR ECONOMICS**

Prerequisite: ECON302 Mr. Gray/Offered every other year

**ECON326 INDUSTRIAL ORGANIZATION**

Prerequisite: ECON302 Mr. Bae

**ECON328 ECONOMIC DEVELOPMENT**

Prerequisite: ECON302 Ms. Ickowitz/Offered every other year

**ECON329 MICROECONOMICS OF DEVELOPMENT**

Prerequisite: ECON302 Ms. Ickowitz/Offered every other year

**ECON357 ENVIRONMENTAL ECONOMICS**

Prerequisite: ECON302 Ms. Geoghegan

**ECON359 SPATIAL ENVIRONMENTAL ANALYSIS**

Prerequisite: ECON302 Ms. Geoghegan, Mr. Gray

**ECON360 PROBABILITY AND STATISTICS**

See Economics 360.

**ECON365 BASIC ECONOMETRICS**

Prerequisite: ECON360 Mr. Callan/Offered every year

**ECON366 APPLIED ECONOMETRICS**

Prerequisite: ECON365 Mr. Gray/Full-year course. Offered every other year

**ECON373 FORECASTING**

Prerequisite: ECON365 Mr. Callan

**ECON377 URBAN ECONOMICS**

Prerequisite: ECON302 Mr. Zhang/Offered every other year

**EDUCATION****Program Faculty**

Thomas Del Prete, Ed.D. - *Chair*

S. Leslie Blatt, Ph.D.

Sharon A. Griffin, Ph.D.

Sarah Michaels, Ph.D.

Heather L. Roberts, Ph.D.

**Clinical Faculty**

John Ameer, Ed.D.

Eric DeMeulenaere, Ph.D.

Letina Jeranyama, Ph.D.

Holly Kapuscinski, M.Ed.

James McDermott, Ed.D.

Maureen Reddy, Ed.D.

Nathaniel C. Seale, M.Ed.

Kate Shepard, M.A.

Marlene Shepard, M.A.

**Program Overview**

The Jacob Hiatt Center for Urban Education and Education Department strive to provide students with outstanding programs in teacher preparation. The Master of Arts in Teaching program, one of the fifth-year accelerated degree programs at Clark, qualifies students for the initial teaching license according to Massachusetts state requirements at either the elementary, middle or secondary level. The initial license is the second level of licensure in Massachusetts and qualifies students to teach in Massachusetts and most other states.

Clark programs are a collaborative endeavor, combining the efforts of faculty from the Education Department, Jacob Hiatt Center for Urban Education, arts and sciences faculty, and teachers from nearby partner schools in Worcester. Partner schools include University Park Campus School, a grades 7-12 school that has become a model of urban school effectiveness, and two secondary schools reconstructed for the same purpose. Clark programs uniquely combine cutting edge school reform and professional learning with teacher education.

**Core Values and Commitments**

The program is committed to developing teachers who:

- believe that all students can learn;
- foster authentic learning, i.e., try to engage all students in meaningful thinking, reading, writing and speaking activities;
- support all students in learning, with an emphasis on academic literacy, personalization, and equitable “best practice” teaching;
- build learning communities with their children based on values such as respect, mutual support and collaboration, and likewise collaborate with colleagues for the benefit of children;
- continually reflect on and assess their own teaching.

In achieving this goal, the Master of Arts in Teaching program:

- immerses students in cohort groups within a partner school for the full academic year;
- integrates school and University perspectives in required courses, with both teachers from partner schools and University faculty sharing instructor roles;



- connects school experience and study in all phases of the program;
- provides students with collaborative learning experiences such as “rounds,” a signature practice that brings together students, teachers and University faculty for structured classroom observation and reflection;
- provides students with teaching responsibility for the majority of the academic year.

## Undergraduate Requirements

In order to qualify for the initial teaching license in Massachusetts at Clark, a student must complete the Master of Arts in Teaching program, one of the University's accelerated degree programs. To prepare for the Master of Arts in Teaching program, undergraduates must demonstrate knowledge of the subjects corresponding to the teaching field of his or her interest. Students usually demonstrate this knowledge by completing an appropriate arts and sciences major and/or taking courses that fulfill state standards, and earning a bachelor's degree. As part of the accelerated degree program, all students in addition take education courses that meet the state professional standards for teachers, and must pass the Massachusetts Tests for Educator Licensure. The initial teaching license in Massachusetts is honored in most other states, as part of a reciprocity agreement.

Undergraduates take EDUC152 Complexities of Urban Schooling as a prerequisite for the MAT. Students interested in an education minor can combine this course with others, although it is not required for the MAT program (interested students should check with Marlene Shepard, Hiatt Center Program Coordinator). Qualified undergraduates begin the MAT program in their senior year as accelerated degree students (see Clark Accelerated B.A./M.A. program requirements). Accelerated degree students in secondary teaching take two courses as seniors, as determined with the Program Coordinator; accelerated degree students in elementary teaching take three courses as seniors, as determined with the Program Coordinator.

The MAT program integrates course work with field experiences in nearby partner schools under the guidance of education faculty and expert practitioners. All students take a three course sequence in Teaching and Learning as well as EDUC361 Human Development and Learning. Students in the middle and high school programs take, as appropriate, a secondary-level curriculum and knowing course in History, the Humanities, the Physical and Natural Sciences, or Mathematics; students in the elementary program take the elementary-level version of all four ways of knowing courses. Additional required courses are listed below by teaching level:

### Elementary (Grades 1-6) Initial Licensure Program:

EDUC360 Literacy Development; EDUC383 Ways of Knowing in History; EDUC384 Ways of Knowing in the Humanities; EDUC386 Ways of Knowing in the Physical and Natural Sciences; EDUC387 Ways of Knowing in Mathematics; EDUC388A Practicum: Elementary Teaching and Learning.

Undergraduate students seeking to qualify for the elementary-teaching license should take a range of courses in the arts and sciences that correspond to state subject-matter knowledge requirements. This requirement may affect a student's choice of liberal-arts major. Students should contact the Hiatt Center program coordinator as early as possible to discuss this and other program requirements.

### Middle School (Grades 5-8) Initial Licensure Program

(offered in the following areas: biology, English, general science, history, mathematics and physics):

EDUC308 Literacy Across the Curriculum; EDUC348 Understanding Best Practice; One “Ways of Knowing” course corresponding to teaching field (see courses in the Elementary program listing above); EDUC378A Practicum: Middle-School Teaching and Learning

Undergraduate students seeking to qualify for the middle school-teaching license normally complete a major in the subject matter area in which they aim to teach.

### Secondary (Grades 8-12) Initial Licensure Program

(offered in the following areas: biology, chemistry, English, French, history, mathematics, physics, Spanish and visual arts):

EDUC308 Literacy Across the Curriculum; EDUC348 Understanding Best Practice; One “Ways of Knowing” course corresponding to teaching field (see courses in the Elementary program listing above); EDUC379A Practicum: Secondary-School Education.

Undergraduate students seeking to qualify for the secondary school-teaching license normally complete a major in the subject matter area in which they aim to teach.

## Accelerated Degree Program

Education offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

## Graduate Programs

The Master of Arts in Teaching (M.A.T.) program is designed for full-time students, including those Clark undergraduates who qualify for the accelerated B.A./M.A. program, seeking the initial teaching license at either the elementary, middle or secondary levels. It begins in spring/summer and extends through the following academic year. Students enter as part of a cohort team that is guided through the program by university and school mentors. They are placed with a teacher mentor in one of the Hiatt Center partner schools at the beginning of the academic year and take the equivalent of 10 courses, including the teaching practicum.

The master's program in urban education and teacher research is offered on a limited basis to teachers. This one year, 10 course program provides well-rounded experiences: core courses in the areas of culture, language, teaching and teaching research; intensive summer institute courses with arts and sciences, education and K-12 teaching faculty; course work in a student's teaching field; a teacher research project and teaching portfolio. Teachers who wish to enroll as part-time students should consult with the Education Department.

## Courses

### EDUC021 LITERACY, LEARNING, WRITING/LECTURE, DISCUSSION

See English 021.

### EDUC060 PUBLIC SCHOOLS AND DEMOCRACY/FIRST-YEAR SEMINAR

From Colonial times to the present, Americans have looked to free public education to be the main instrument for all citizens to access political maturity and equality, as well as economic opportunity. In 1848, educator Horace Mann wrote: “Education ... is the great equalizer of the conditions of men—the balance—wheel of the social machinery.” In this seminar, using primary documents—laws, reports, and court decisions—both historical and contemporary, we will

explore both the historical context and, especially, the current realities in public schools, to determine how effective they have been and are at present in carrying out this crucial responsibility.

**EDUC112 TRANSFORMATIVE SCHOOLING: DOCUMENTARY VIDEO FOR SOCIAL CHANGE/FIRST-YEAR SEMINAR**

This is a field-based and inquiry-oriented seminar, an apprenticeship in documentary filmmaking, as well as school and community research and advocacy for social change. The course involves instruction in the basics of video production (using state-of-the-art digital cameras) and seminar members partner with new and experienced teachers in inner-city public schools. We work with them as video assistants and also develop our own films about the challenges and possibilities of urban school reform. In addition to hands-on activity, there is serious attention to reading in the field of ethnographic research, education reform and community institutions that support youth development. Moreover, seminar members get involved in grassroots organizing and soliciting input from the community, as well as ongoing critique of their planning documents, filmed footage and written companion texts. We thus integrate field work with theory and reflective critique. A final project for this seminar will be completed in the spring semester. Fulfills the Values Perspective and is recommended for all communication and culture majors. Ms. Michaels/Offered every year

**EDUC152 COMPLEXITIES OF URBAN SCHOOLING/ LECTURE, DISCUSSION**

Addresses the social and academic questions that surround urban education using linguistic, sociological and psychological perspectives. Through lecture, discussion and field work, students will explore challenges faced by educators. For undergraduate students in the initial teacher-licensure programs. Mr. Ameer/Offered every year

**EDUC155 EDUCATION AND SOCIAL POLICY/LECTURE, DISCUSSION**

Examines social problems, social policy and education. Conceptual tools for the analysis of social policies are used. Examinations of existing programs and social agencies enable students to understand agency functions, client population and the relationship between the individual agency and the larger social-service network. Emphasis is placed on social problems and social solutions, linking individuals and external primary groups with societal resource systems and the impact of social-policy change on individuals and institutions. Mr. Seale/Offered every year

**EDUC194 FIELD EXPERIENCE: HUMAN SERVICES 1/DISCUSSION, FIELD PLACEMENT**

Provide direct, supervised experience within educational and human-services agencies. Placements are based upon students' experience, goals and academic backgrounds. Placement possibilities include schools, mental-health centers, institutions, the courts, substance-abuse centers, crisis agencies and group homes. A weekly seminar provides the opportunity for students to analyze their field-work experience. Special note: These courses may be taken as a full-year, two-course sequence (EDUC194 and 195) or as a single course either semester (EDUC194). Mr. Seale/Offered every year

**EDUC195 FIELD EXPERIENCE: SPECIAL EDUCATION AND HUMAN SERVICES 2/DISCUSSION, FIELD PLACEMENT**

Provide direct, supervised experience within educational and human-services agencies. Placements are based upon students' experience, goals and academic backgrounds. Placement possibilities include schools, mental-health centers, institutions, the courts, substance-

abuse centers, crisis agencies and group homes. A weekly seminar provides the opportunity for students to analyze their field-work experience. Special note: These courses may be taken as a full-year, two-course sequence (EDUC194 and 195) or as a single course either semester (EDUC194). Mr. Seale/Offered every year

**EDUC265 EMOTIONAL DEVELOPMENT/SEMINAR**

Examines what emotions are and how they develop from birth to adulthood. Emphasis is placed on emotional development during childhood; on the ways emotions are shaped by cognitive, social and biological factors; and on the ways emotions shape learning and behavior. Ms. Griffin/Offered periodically

**EDUC266 ANALYSIS OF INDIVIDUAL ABILITY AND STYLE/LECTURE, DISCUSSION, PRACTICUM**

Uses techniques to understand the individual as a whole. The theory of individual assessment, some tools for assessment, and the analysis of assessment data will be covered. Focus is placed on understanding, administering and interpreting both traditional and alternative assessment tools, including measures of cognitive ability, scholastic achievement and personality. Students are required to administer assessment procedures and analyze case histories. Staff/Offered every year

**EDUC268 SEC. 1 AND 2 PSYCHOEDUCATIONAL PRACTICUM AND SEMINAR, SECTIONS 1 AND 2/SEMINAR, FIELD PLACEMENT**

Provides a two-semester placement, eight to 10 hours a week, within the pupil-personnel department of a public-school system. A school psychologist and/or counselor will function as an ongoing supervisor. Activities include experience in conducting and interpreting psychoeducational assessments, obtaining social and developmental-history information through home visits, and observing and participating in the development of individualized educational plans as part of the team evaluation process. Mr. Seale/Offered every year

**EDUC269 THE SKILLED HELPER/LECTURE, DISCUSSION, PRACTICUM**

Designed for the development of the helping professional. Emphasis is placed on dynamics of the helping relationship and basic interviewing skills. Class exercises are used to facilitate skill development. Students who are not concurrently taking a field course are placed in a human-service agency one-half day per week. Mr. Seale/Offered every year

**EDUC278A PRACTICUM: MIDDLE-SCHOOL TEACHING/LEARNING**

Involves at least 300 hours of teaching/learning experience at a professional-development school. Students will be supervised by education faculty and/or professional-development school teachers. Mr. Del Prete/Offered every year

**EDUC278B SEMINAR: MIDDLE-SCHOOL TEACHING/LEARNING**

The aim of this field-based seminar is to foster reflective practice and to deepen understanding of how to engage, support, sustain and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work, which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/Offered every year

**EDUC279A PRACTICUM: SECONDARY EDUCATION**

The culminating experience for the secondary initial-licensure candidate. Students complete at least 300 hours of field work with corresponding seminars and conferences. Staff/Offered every year



**EDUC299 SEC. 1 DIRECTED READINGS — UNDERGRADUATE**

Independent study for qualified students on a selected topic. Permission of instructor required. Offered for variable credit. Staff/Offered every year

**EDUC299 SEC. 2 DIRECTED RESEARCH — UNDERGRADUATE**

Staff/Offered every year

**EDUC299 SEC. 4 FIELD PROJECT — UNDERGRADUATE**

Provides individualized and extended experiences in a wide variety of educational and human-service agencies and institutions. Supervision is provided by the University and field-agency personnel. Combines related seminars, conferences and readings as a basis for critical analysis of the experiences within the context of applied theory and practice. Offered for variable credit. Staff/Offered every year

**EDUC304 TEACHING AS RESEARCH SEMINAR I, II**

Brings together urban-school teachers (at the elementary, middle, and secondary level) with graduate students and faculty involved in university-based educational research. Focuses on qualitative, sociolinguistic research in classrooms, emphasizing the study of talk and texts as a vehicle for better understanding students' learning, developing systematic techniques for describing and critiquing classroom activities, and supporting effective learning among a socioculturally diverse population of students. Participants meet in small, facilitated groups to carry out qualitative research in urban classrooms and develop forums through which their work can be disseminated to a wider community of teachers and researchers. Staff/Offered periodically

**EDUC308 LITERACY ACROSS THE CURRICULUM/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT**

See Education 208.

**EDUC311 TEACHING AND LEARNING, PART I/SEMINAR, DISCUSSION**

Challenges the theory that there is one best way of understanding that students must learn according to that one way, and that their capacity to learn ought to be judged accordingly. Explores many adequate pathways for developing knowledge and emphasizes that teachers who acknowledge and support different pathways help make learning more accessible for students. This premise and its implications for teaching, curriculum, assessment, the formation of learning communities for diverse groups of students, and the role of the teacher in enabling students to actively construct knowledge are explored. Mr. Del Prete/Offered every May.

**EDUC314 SELECTED TOPICS IN CHILDREN'S LITERATURE/SEMINAR, DISCUSSION**

This course will immerse students in reading and writing about chapter books written for children and young adults. We will read as a class one to two books per week depending on length. Additional reading will be required for a class presentation and also for the final project. The bulk of the reading will be drawn from the Newbury Medal and honor-award winners. This course will focus on reading, discussing and writing about children's/young adults' literature as literature rather than issues of teach-ability or age appropriateness. Ms. Roberts/Offered periodically

**EDUC326A -1 WAYS OF KNOWING SEMINAR**

This yearlong seminar is designed to support M.A.T. students in developing an understanding of what it means to teach according to the ways of thinking, inquiring, writing and performing represented by each academic discipline in the context of diverse urban-learning communities. Ms. Kapuscinski/Offered every year

**EDUC326A-2 WAYS OF KNOWING SEMINAR - MIDDLE/SECONDARY**

This yearlong seminar is designed to support M.A.T. students in developing an understanding of what it means to teach according to the ways of thinking, inquiring, writing and performing represented by each academic discipline in the context of diverse urban-learning communities. Mr. Del Prete/Offered every year

**EDUC327 CULTURE, LANGUAGE AND EDUCATION**

Graduate-level course dealing with theories and practices relevant to teaching and learning within a sociocultural perspective. Questions about language and cognition, multicultural and social diversity in the classroom, curricular and pedagogical theories and practices, language and literacy development, bilingual education, access and equity, learning across the life span, and the politics of education are discussed. In all areas, analysis of language and communication is used as a key tool for critical understanding. Staff/Offered every year

**EDUC359 TEACHING AND LEARNING, PART II/SEMINAR, DISCUSSION**

Challenges the theory that there is one best way of understanding that students must learn according to that one way, and that their capacity to learn ought to be judged accordingly. Explores many adequate pathways for developing knowledge and emphasizes that teachers who acknowledge and support different pathways help make learning more accessible for students. This premise and its implications for teaching, curriculum, assessment, the formation of learning communities for diverse groups of students, and the role of the teacher in enabling students to actively construct knowledge are explored. Mr. Del Prete/Offered every Fall.

**EDUC360 LITERACY DEVELOPMENT / LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT**

See Education 260.

**EDUC361 HUMAN DEVELOPMENT AND LEARNING / LECTURE, DISCUSSION**

See Education 261.

**EDUC362 TEACHING AND LEARNING, PART III/SEMINAR, DISCUSSION**

Challenges the theory that there is one best way of understanding that students must learn according to that one way, and that their capacity to learn ought to be judged accordingly. Explores many adequate pathways for developing knowledge and emphasizes that teachers who acknowledge and support different pathways help make learning more accessible for students. This premise and its implications for teaching, curriculum, assessment, the formation of learning communities for diverse groups of students, and the role of the teacher in enabling students to actively construct knowledge are explored. Mr. Del Prete/Offered every Spring.

**EDUC363 COGNITION AND INSTRUCTION/SEMINAR**

Students will investigate the conceptual networks children construct for mathematical concepts, the instructional principles that underlie effective instruction and the variety of methods that can be used to assess children's learning and development. Each student will conduct an independent research study on a topic of interest. Ms. Griffin/Offered periodically

**EDUC367 SEC. 1 CLINICAL EXPERIENCE AND SEMINAR I (ELEMENTARY)**

EDUC367 Sec. 2 Clinical Experience and Seminar I (Middle School)

**EDUC367 SEC. 3 CLINICAL EXPERIENCE AND SEMINAR I (SECONDARY)**

Integrates at least 200 hours of focused field work with group professional-development activities such as "rounds" and seminar discussion. Students will be mentored by education faculty and/or professional-development school teachers as they broaden and deepen their understanding of particular approaches to curriculum (consistent with local, state and national curriculum frameworks) and develop expertise in teaching practices (e.g., fostering and assessing literacy development) that engage groups of children, including children with special needs, in active and developmentally appropriate learning. This experience promotes students' capacity to build and participate in a professional learning community reflecting on teaching, children's learning, schooling and education. Mr. Del Prete/Offered every year

**EDUC368 SEC. 1 CLINICAL EXPERIENCE AND SEMINAR II (ELEMENTARY)****EDUC368 SEC. 2 CLINICAL EXPERIENCE AND SEMINAR II (MIDDLE)****EDUC368 SEC. 3 CLINICAL EXPERIENCE AND SEMINAR II (SECONDARY)**

Integrates at least 350 hours of field work with group professional-development activities such as "rounds," seminar discussion and teacher research. Students will be mentored by education faculty and/or professional-development-school teachers as they develop their teaching practice and understanding of children's learning. Particular emphasis will be placed on ways to develop and support children as active thinkers, on providing multiple paths of learning for children in keeping with diverse needs and ways of knowing, and on creating and sustaining a responsive and responsible learning community. Students will frame and conduct a teacher research project to build understanding of some aspect of the teaching-learning process. Mr. Del Prete/Offered every year

**EDUC377 FACILITATING TEACHER RESEARCH: ETHNOGRAPHIC AND SOCIOLINGUISTIC METHODS**

Provides theoretical, methodological and applied research training to classroom teachers and graduate student/researchers interested in facilitating teacher research. Readings will include text about teacher research, by teacher researchers, and about theoretical and empirical work on group discussion and the social formation of mind. In addition, participants will be involved in ongoing data collection and analysis of existing teacher research groups. Thus the forum will develop practical skills in group leadership, as well as research skills in documenting and analyzing teacher research. This is an advanced seminar for people who have already participated in teacher research and/or facilitating teacher-research groups. Permission of the instructor is required. Ms. Michaels/Offered periodically

**EDUC378A PRACTICUM: MIDDLE-SCHOOL TEACHING/LEARNING**

Involves at least 300 hours of teaching/learning experience at a professional-development school. Students will be supervised by education faculty and/or professional-development-school teachers. Mr. Del Prete/Offered every year

**EDUC378B SEMINAR: MIDDLE-SCHOOL TEACHING/LEARNING**

The aim of this field-based seminar is to foster reflective practice, and to deepen understanding of how to engage, support, sustain and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work, which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/Offered every year

**EDUC379A PRACTICUM: SECONDARY EDUCATION**

Involves at least 300 hours of teaching/learning experience at a professional-development school. Students will be supervised by education faculty and/or professional-development-school teachers. Mr. Del Prete/Offered every year

**EDUC379B SEMINAR: SECONDARY-SCHOOL TEACHING AND LEARNING**

The aim of this field-based seminar is to foster reflective practice and to deepen understanding of how to engage, support, sustain and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work, which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/Offered every year

**EDUC383 WAYS OF KNOWING IN HISTORY AND THE SOCIAL SCIENCES / LECTURE, DISCUSSION, FIELD PLACEMENT**

See Education 283.

**EDUC384 WAYS OF KNOWING IN THE HUMANITIES / LECTURE, DISCUSSION, FIELD PLACEMENT**

See Education 284.

**EDUC386-A WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES/LECTURE, DISCUSSION, FIELD PLACEMENT - ELEMENTARY**

See Education 286-A.

**EDUC386-B WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES/LECTURE, DISCUSSIONS, FIELD PLACEMENT - MIDDLE/SECONDARY**

See Education 286-B.

**EDUC387-A WAYS OF KNOWING IN MATHEMATICS/LECTURE, DISCUSSION, FIELD PLACEMENT - ELEMENTARY**

See Education 287-A.

**EDUC387-B WAYS OF KNOWING IN MATHEMATICS/LECTURE, DISCUSSION, FIELD PLACEMENT**

See Education 287-B.

**EDUC399 SEC. 1 DIRECTED READINGS — GRADUATE**

Independent critical analysis of literature related to individual research. Offered for variable credit. Staff/Offered every year

**EDUC399 SEC. 2 DIRECTED RESEARCH — GRADUATE**

Individual research with direction from an instructor. Offered for variable credit. Staff/Offered every year

**PHYS020 DISCOVERING PHYSICS/LECTURE, LABORATORY**

See Physics 020.



## ENGINEERING

### Program Faculty

Charles Agosta, Ph.D. - *Chair*

Lee Rudolph, Ph.D.

Luis Smith, Ph.D.

### Program Overview

The 3/2 engineering program at Clark University is a five-year program offered in conjunction with another affiliated school. Currently this school is Columbia University. Students enrolled in this program complete three years in residence at Clark followed by two additional years at the engineering school. Students completing the program receive a B.A. degree from Clark and a B.S. degree in engineering from Columbia.

At Clark, students major in a field that strongly overlaps the entrance requirements for the engineering school. Appropriate majors include chemistry, computer science, environmental science and policy, mathematics, physics, and a self-designed liberal-arts/engineering major. At the engineering school, students may major in any of the fields they offer. In addition to the traditional engineering fields taught at all schools, unique programs such as engineering and public policy, biomedical engineering, system science and engineering, and fire-protection engineering are also available. Please consult the program chair for further information.

While the program is open to all Clark students, the required curriculum must be started during the first year of study to permit the timely completion of all requirements. Those students whose high-school background (as determined by placement examinations) has not prepared them to enter calculus (MATH120) and composition (ENG020) during their first semester must attend summer school to complete the requirements on time. All students intending to pursue the program are required to notify the program chair of their intent at the beginning of their first year and to choose their courses each semester in consultation with committee members.

Students are encouraged to seek a major adviser who is familiar with the program and the advice of 3/2 Engineering Committee members. Sample curricula for appropriate majors can be obtained from the committee chair or on the Clark Web site. Students intending a self-designed liberal-arts/engineering major may wish to use the 3/2 Engineering Committee as their major advisory committee.

Students interested in 3/2 Engineering must contact the committee chair, Charles Agosta (phone: 508-793-7736, e-mail: [cagosta@clarku.edu](mailto:cagosta@clarku.edu)) before they sign up for classes in their first year.

### Enrollment at the Engineering School

Students submit a formal application for admission to the engineering school through the 3/2 Engineering Committee during their junior year. Students receiving a positive endorsement from the committee normally can expect admission for enrollment as juniors at the engineering school in the following September. Application for financial aid is made at the same time, and those students receiving financial aid can expect to be supported at levels that are generally consistent with the level of Clark's support during the first three years. Please note however that foreign students must rely on other sources of funds while at Columbia.

## Undergraduate Requirements

In addition to the requirements of the Program of Liberal Studies and their major at Clark (indicated elsewhere in this catalog), students must meet the entrance requirements of the engineering school. These requirements, which are essentially the same for all schools, can be found on the Clark Web site. Detailed questions concerning individual schools can be discussed with committee members.

The additional Clark requirements for the liberal-arts major and Program of Liberal Studies must be met concurrently with the above requirements. Several majors require additional summer-school work at Clark or advanced-placement standing to complete all requirements within the three-year period in residence at Clark. Students who complete a full year of study at the engineering school and who have completed all of Clark's requirements are eligible for the B.A. at the end of the fourth year of study.

## ENGLISH

### Program Faculty

Virginia Mason Vaughan, Ph.D. - *Chair*

James Elliott, Ph.D.

SunHee Kim Gertz, Ph.D.

Betsy P. Huang, Ph.D.

Fern Johnson, Ph.D.

Lisa Kasmer, Ph.D.

Stephen M. Levin, Ph.D.

Meredith Neuman, Ph.D.

### Adjunct Faculty

John Bassett, Ph.D.

Gino Dilorio, M.F.A.

### Department Instructors

Jessica Bane Robert, M.F.A.

Louis Bastien, Ph.D.

Timothy Connolly, M.A.

James Dempsey, M.A.

Michael Eldridge, B.A., S.A.G.

Steven Krzywda, M.A.

Allia Matta, M.A.

Ethan Myers, M.A.

Susan E. Richmond, M.A.

Heather L. Roberts, Ph.D.

D. L. Stephenson, Ph.D.

William G. Tapply, M.A.T.

Lucilia Valerio, Ph.D.

### Emeriti Faculty

John J. Conron, Ph.D.

Serena S. Hilsinger, Ph.D.

Stanley Sultan, Ph.D.

### Graduate Studies in English

SunHee Kim Gertz, Ph.D., *Director*

### Writers in Residence

William Tapply, M.A.T.

### Writing Program

Jennifer Plante, M.A. - *Interim Director*

Jessica Bane Robert, M.F.A.

## Program Overview

The program is primarily designed to meet the needs and interests of English majors and minors, although the variety of courses we offer may appeal to other students as well. We assist students in developing skills in close reading, critical thinking and effective writing, and in acquiring knowledge and experience valuable to any vocation. Moreover, the program encourages the development of a sense of cultural history, sensitivity to literary values, and first-hand knowledge of important authors, works and periods of literature in English.

We advise English majors to take three historical surveys, one a yearlong sequence, early in their programs. Any student majoring only in English should also select—in consultation with his or her adviser—a suitable area of specialization drawing on courses, both inside and outside the English Department (see below).

Majors and minors should note that some courses fulfill more than one requirement. Requirements may also be fulfilled, through an arrangement with the Worcester Consortium of Higher Education, at Assumption College and the College of the Holy Cross. For those interested in studying abroad, majors and minors should contact the Office of Study Abroad Programs regarding our partner program at the University of East Anglia. In addition, the London Internship Program offers a variety of opportunities in fields such as theater and journalism.

For these and other aspects of the program, we strongly urge majors and minors to consult with their advisers.

The English Department is an active member of Clark's Higgins School of the Humanities and encourages students to participate in the school's events and opportunities.

## Undergraduate Requirements

### Nonrequired Preparatory Courses:

- IDND018 Expository Writing/Workshop
- ENG019 The Essay: Reading and Writing/Workshop
- ENG020 Introduction to Literature and Composition/Discussion

### Core Requirements:

A minimum grade of C is required to receive major field credit. Each designation in parentheses in the descriptions below is used in course listings every semester in order to identify what requirement a course meets. Thus, if a course does not appear in the list below (for example, a new course), you can nonetheless readily see what requirements it meets through these designations.

### A. Historical Sequences (A; 3 courses)

The **three** courses used to satisfy this requirement must include **either** the entire sequence ENG140 and ENG141 **or** the **entire** sequence ENG180 and ENG181.

1. Either one of the two sequences (2 courses):  
ENG140 Major British Writers I  
ENG141 Major British Writers II

OR

ENG180 Major American Writers I  
ENG181 Major American Writers II

2. Each major **must** take **one other additional single** course offered as a historical sequence course, as, for example, ENG133 Survey of Women Writers I; 134 Survey of Women Writers II; ENG182 African-American Literature I; or ENG183 African American Literature II (no double-counting with courses in Category A-1 above).

### B. Genre Courses (2 courses)

1. Each major must take at least **one** poetry course (B-1), such as:  
ENG107 Creative Writing: Poetry  
ENG110 English Poetry I  
ENG111 English Poetry II  
ENG184 American Poetry
2. Each major must also take at least **one** other genre course (B-2), such as:  
ENG135 The Short Story  
ENG143 Terrible Beauty: The Art of Tragedy  
ENG144 Drama of the Western Tradition  
ENG145 Fabulae: The Genre of Romance  
ENG146 Oliver Twisted: The Literature of the Fantastic  
ENG206 Writing the Novel I

### C. Period Requirements (2 courses)

1. Each major must take at least **two** courses of literature before 1700, **one** of which must be at the 200-level (C-1a for 100-level; C-1b for 200-level), such as:  
ENG120 Introduction to Shakespeare  
ENG140 Major British Writers I (may double-count as a historical sequence course)  
ENG144 Drama of the Western Tradition  
ENG150 Introduction to Medieval Literature  
ENG250 Medieval Literature Seminar  
ENG251 Chaucer  
ENG253 Advanced Shakespeare  
ENG254 Still Spaces—East Meets West  
ENG255 Studies in the Renaissance  
ENG256 Shakespeare from Page to Stage  
ENG294 History of the English Language
2. Each major must take at least **one** 200-level course of literature between 1700 and 1900 (C-2), such as:  
ENG260 Studies in 18th-Century British Literature  
ENG262 Studies in 19th-Century British Literature  
ENG263 British Romantic Literature  
ENG265 Victorian Literature  
ENG281 American Literary Renaissance  
ENG282 Studies in 19th-Century American Literature  
ENG283 Visions of Representation 1860-1920
3. Each major must take at least **one** 200-level course of literature after 1900 (C-3), such as:  
ENG230 Southern Writers of the 20th Century  
ENG231 William Faulkner  
ENG239 Aliens and Others in Science Fiction  
ENG272 Radical Thought and the Black Arts Movement, 1966 to 1976  
ENG275 Fictions of Empire: Studies in Global English Literature  
ENG276 Ethnic America: Literary and Theoretical Perspectives  
ENG278 Contemporary British Literature, Culture and Film  
ENG279 Fictions of Asian American  
ENG291 Literature of the Harlem Renaissance



#### D. Theory or Criticism (1 course)

Each major must take at least **one** 200-level seminar in the theory or practice of criticism (D), such as:

- ENG240 Literary Analysis and Critical Methods
- ENG245 Mythopoetics
- ENG248 Contemporary Literary Theory
- ENG249 Signs and Crossroads: Semiotic Theory and Practice
- ENG252 Cultural Discourses of Advertising
- ENG277 Race and Gender in African American Literary Theory
- ENG295 Gender and Discourse
- ENG340 Introduction to Graduate Study
- CMLT251 Seminar in Literary Criticism

#### E. Capstone Requirement (E)

All English majors must take the Capstone course, ENG290.

#### F. Area of Specialization

As early as possible, in combination with an adviser, an English major should select an *Area of Specialization* (six courses, four of which are typically fulfilled by core courses in the major).

Students may substitute a second major, a University concentration, or a minor for the *Area of Specialization* as long as they demonstrate the links between the English major and the substituted area of study in the Capstone or in another appropriate course.

Descriptions of areas of specialization with lists of required and recommended courses are available from the department.

#### Honors Program

At the end of the academic year, the faculty identify qualified junior majors and invite them to work on a yearlong honors thesis during their senior year. Other students who wish to take honors in English should identify an area of interest, consult with an appropriate honors adviser, and apply to the department chair before the end of the junior year.

#### English Minor

A minor provides a student majoring in another department with general background in English literature, as well as with skills in critical reading and writing. Ordinarily, the chair acts as adviser to minors. The minor in English requires at least six English courses, at the 100- to 200-level.

Each designation in parentheses in the descriptions below is used in course listings every semester in order to identify what requirements a course meets. Thus, if a course does not appear in the list below (for example, a new course), you can nonetheless readily see what requirements it meets through these designations.

1. One course in poetry (B-1)
2. One historical sequence (two courses) from the following: (A)
  - ENG133-134 Survey of Women Writers
  - ENG140-141 Major British Writers
  - ENG180-181 Major American Writers
  - ENG182-183 African-American Literature
3. One seminar in criticism from the following (D):
  - ENG240 Literary Analysis and Critical Methods
  - ENG248 Contemporary Literary Theory
  - ENG249 Signs and Crossroads: Semiotic Theory and Practice
  - ENG295 Gender and Discourse
  - ENG340 Introduction to Graduate Study in English

4. At least two other English courses, one of which must be a 200-level seminar.

#### Graduate Program

The program leading to the Master of Arts in English encourages innovative, individually designed approaches of study and more traditional approaches to literature. The controlled size of the program fosters an atmosphere of intensive intellectual exchange among faculty and students. Teaching assistantships with tuition remission plus stipend and full- and part-time tuition-remission scholarships are available on a competitive basis.

#### Requirements

For the Master of Arts, the student must satisfactorily complete at least eight upper-level courses or seminars, which include ENG340 Introduction to Graduate Study, and ENG397 Master's Thesis.

Graduate students will receive 300-level designations for graduate-level course work in those 200-level courses deemed suitable for graduate credit and for which they are expected to complete extra graduate requirements. Students are also required to register for and participate in ENG390 Departmental Colloquium (no course credit), where they will present working drafts on some aspect of their thesis topics. In addition to completion of the master's thesis (ENG397), the student must pass a final oral examination.

#### Courses

##### ENG020 INTRODUCTION TO LITERATURE/DISCUSSION

This seminar-sized course introduces students to three or more types of literary form (fiction, poetry, and one other genre). Students will learn the most important tools of literary analysis, including the uses of metaphoric language, sound effects, and rhetorical devices. Individual sections of Introduction to Literature may be centered on a particular theme, but in all sections, students will practice writing effective essays that analyze elements of literary form. Meets the Verbal Expression requirement. Staff/Offered every semester

##### ENG102 DOCUMENTARY WRITING

Documentary Writing will be a course centered on the art and craft of writing for all kinds of documentaries—both the theory behind the work, and the application of that theory. You will be expected to write consistently throughout the term, a minimum of ten hours a week, and you will complete preproduction scripts for at least two documentaries. You will also be expected to expand your understanding of documentaries by reading the course texts. Mr. Eldridge/Offered periodically

##### ENG104 TO THE WOODS: WALDEN TODAY/FIRST-YEAR SEMINAR

In a workshop setting, students will read WALDEN, other selections by Henry David Thoreau including "On Civil Disobedience," and some related contemporary writings such as "The Monkey Wrench Gang" by Edward Abbey, "The Survival of the Bark Canoe" by John McPhee, "Silent Spring" by Rachel Carson, "Walden Two" by B. F. Skinner, and "Last Child in the Woods" by Richard Louv. The class will take a field trip to Walden Pond. Class discussions and exercises and weekly reflective essays will focus on understanding and analyzing the writings in their own context and on applying their perceptions and values to contemporary American concerns and issues such as self-reliance, solitude, our connections with nature, and the individual's relationship with government. The final term paper will allow students

to use WALDEN and the other writings as windows into issues in disciplines of particular interest to them, including politics, religion, economics, science, art, literature, psychology and philosophy. Fulfills the Verbal Expression requirement. You must be placed at the verbal-expression level to be admitted into this seminar. Mr. Tapply/Offered periodically

#### **ENG105 NEWS WRITING/WORKSHOP**

Covers the basics of news writing, from reporting an event to writing an obituary. Students learn how to collect information, conduct interviews and organize writing into crisp news copy. Class work includes weekly deadline writing assignments. Homework: weekly writing exercises based on textbook examples and field assignments, as well as readings from texts and daily newspapers. Mr. Connolly/Offered every year

#### **ENG106 CREATIVE WRITING: FICTION/WORKSHOP**

For students who are inspired to write short or long stories. Equal emphasis on writing well and creating boldly, with focus on giving and receiving criticism in the workshop format. Students will be encouraged to “find their voices” by experimenting with style, genre and structure. Graded on a credit/noncredit basis only. Mr. Tapply/Offered every semester

#### **ENG107 CREATIVE WRITING: POETRY/WORKSHOP**

A significant part of the class will be dedicated to exploring each student's poetry through a constructive workshop approach. We will experience how poetry comes alive in voice and use these insights to develop both oral and written media of expression. Students are expected to bring creative work to each class. As the semester progresses, we will experiment with ways to edit a gathering of poems into a coherent manuscript. Finally, we will also talk about the nuts, bolts and jolts of getting published, as well as finding venues for public reading. This course could benefit both beginning and experienced writers. Not open to first-year students. For undergraduate English majors and minors, this course satisfies the Genre (B-1) requirement. Graded on a credit/noncredit basis only. Ms. Richmond/Offered every year

#### **ENG108 INTRODUCTION TO SCREENWRITING**

This course is centered on the art and craft of screenwriting—both the theory behind the work, and the application of that theory. Students will be expected to write consistently throughout the term, a minimum of 10 hours a week, and complete a full first draft of a screenplay by the end of term. Students will also be expected to expand their film vocabulary through viewing selected films and reading the course texts. The goal of this course is to provide a full understanding of the theories and principles behind writing for the screen—and to provide a structure in which those principles and theories can be applied. Mr. Eldridge/Offered periodically

#### **ENG110 ENGLISH POETRY I/LECTURE, DISCUSSION**

This course will help you to become a better close reader of modern poetry and introduce you to a selection of British poets. We will read poetry and essays by major poets of the British canon, including Blake, Wordsworth, Coleridge, Shelley, Keats, Tennyson, Browning, Christina Rossetti, Yeats, Eliot, Larkin, and Heaney. We will also read selections from recent poets not generally considered canonical, who experiment with poetic form and interrogate conventional understandings of British national identity. Our central aims will be to enhance your comprehension of prosody and to investigate connections

between poetry, politics, and culture. Fulfills the Verbal Expression requirement. Strongly recommended for English majors in the first or second year; seniors by permission. For undergraduate English majors and minors, this course satisfies the Genre (B-1) requirement. Mr. Levin/Offered every semester

#### **ENG112 CONTEMPORARY WOMEN PLAYWRIGHTS**

See Theater Arts 109.

#### **ENG113 LITERATURE OF BASEBALL/FIRST-YEAR SEMINAR**

Baseball has often been cited as “America’s game,” in the sense that it is thoroughly interwoven into the history of American culture. Many writers, particularly in the 20th century, have seen in the game fertile ground for describing their interpretations of the American experience. It is a game which offers tremendous variety within rigidly set boundaries. In short, baseball is a metaphor to which Americans return repeatedly to express their sense of identity. It is this general theme that this course will explore: why is baseball so attractive to American writers of all types, and how do they use the game and its players as the basis for suggesting who we are? Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Mr. Elliott/Offered periodically

#### **ENG114 AMERICAN TALK/FIRST-YEAR SEMINAR**

This seminar explores the distinctive character of talk in the United States, with emphasis on the ways in which talk is associated with groups and situational identities. The course revolves around understanding the dynamic and diverse nature of talk as a cultural code and resource. Topics include the linguistic markers of regional and social dialects, styles of speaking, public discourse forms such as presidential debates, and television and film representations of American talk. Ms. Johnson/Offered periodically

#### **ENG115 SPECULATIVE FICTION/FIRST-YEAR SEMINAR**

Speculative fiction (more popularly known as science fiction) entertains the “what if” and presents alternative conceptions of history, society, and identity. Committed to exploring the possibilities and limitations of the alternative and the different, these works interrogate established boundaries of identities and provide critical perspectives on prevailing beliefs and ideologies. The course moves chronologically through works that fall loosely under the speculative fiction subgenres of fantasy/horror, alternative histories, future dystopias, and political allegories. We will also devote some attention to formal analysis, specifically the ways in which speculative fiction narratives experiment with and break from traditional literary conventions to offer new ways of perceiving, constructing, and deconstructing our social realities. Authors include Mary Shelley, H. P. Lovecraft, H.G. Wells, Isaac Asimov, Philip K. Dick, Ursula Le Guin, Octavia E. Butler, William Gibson, Neal Stephenson, Kim Stanley Robinson, and Ted Chiang. Fulfills the Verbal Expressions requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Ms. Huang/Offered periodically

#### **ENG118 WEBS AND LABYRINTHS: IMAGINING GLOBALIZATION IN ART AND LITERATURE/FIRST-YEAR SEMINAR**

The globalized world calls for a new language to describe it: new metaphors, new stories, and new modes of storytelling. We now live (we so often hear) in a world of webs, labyrinths, and networks—metaphors that suggest the breaking down of borders and increased connectivity across cultures, nations, markets, and geographies. This course will introduce you to writers, poets, painters, photographers,



sculptors, architects, and filmmakers who are trying to find a language in their work to address a sense that we live in an age of constant newness. We will consider different sorts of border crossings associated with the era of global culture: reflexive modes of storytelling that break down boundaries between artists and audiences; sweeping historical novels that weave together the real and the “magical”; and multimedia narratives that combine texts and technology. We will think about new thematic concerns that surface with the rise of commercial societies: how to construct a “self” in a global world; the persistence of modern forms of empire and inequality; the use of technology for social surveillance; the rise of global English; and contemporary expressions of cross-cultural conflict and encounter. Our focus will be on the dialogues that take place among genres and disciplines, and on narrative experiments that make it difficult to draw clear distinctions between fiction, poetry, drama, and visual culture. Fulfills the Global Comparative perspective. You must be placed at the Verbal Expression level to be admitted into this seminar. Mr. Levin/Offered periodically

#### **ENG120 INTRODUCTION TO SHAKESPEARE/LECTURE, DISCUSSION**

Designed for any student who wants an introduction to Shakespeare. Seven major plays are read and discussed in detail with an emphasis on performance. For undergraduate English majors this course satisfies the Period (C-1a) requirement. You must have satisfied your Verbal Expression requirement to take this course. Ms. Vaughan/Offered every year

#### **ENG121 SHAKESPEARE RECYCLED/FIRST-YEAR SEMINAR**

This seminar explores the many ways Shakespeare's plays have been reproduced and adapted throughout the world in drama, novels, film, and television. Students also design their own projects, exploring such topics as Shakespeare in advertising, Shakespearean cartoons and comic books, Shakespeare in musicals, and Shakespeare in contemporary film and television. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Ms. Vaughan/Offered periodically

#### **ENG122 TERROR OF THE GOTHIC/FIRST-YEAR SEMINAR**

“The apparent delight with which we dwell upon objects of pure terror . . . is a paradox of the heart,” claims Romantic writer Anna Barbauld. In this course, we will explore our delight in terror through the world of nineteenth-century Gothic fiction, novels like Mary Shelley's *Frankenstein* and Bram Stoker's *Dracula*, a world of pain and destruction, fear and anxiety. In tracing the recurrent themes of sin, family dynamics, politics, and nature within Gothic fiction, we will examine both the relationship of this fiction to the dominant culture of the nineteenth century, as well as the dark underside this fiction represents. Following current literary scholarship, we will pose questions about representations of violence; the significance of fantasy and fear; and the role of gender, race, class and sexuality in this body of work. Throughout the course, we will discuss the legacy of this fiction in our modern obsession with horror in film, culture, and novels. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Ms. Kasmer/Offered periodically.

#### **ENG131 BORDER CROSSINGS: NARRATIVES OF TRAVEL, EXILE, AND IMMIGRATION/FIRST-YEAR SEMINAR**

The course examines narratives of travel, exile, immigration, and displacement in modern literature and film that trespass geographical, political and linguistic boundaries, and create new literary spaces that define and reshape modern identities. We will explore North

American, Chicano, Native-American, African, and Middle Eastern literature. Close reading of texts will ground our interrogation and discussion of such themes and issues as travel and tourism, margins, borders and borderlands, immigration, language and culture, community, hyphenated identity, war and conflict, race, gender and religion. The course will be run as a seminar with student presentations, written responses, and class discussion as important parts of the requirements. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Ms. Valerio/Offered periodically

#### **ENG133 SURVEY OF WOMEN WRITERS I/LECTURE, DISCUSSION**

Examines how women writers before 1900 address, confront, avoid, subvert and question traditional notions of gender, culture, domesticity, history, ethnicity and sexuality. Close attention is paid to textual reading, the historical and intellectual context of works, and different critical approaches to women's writing. Authors include Behn, Burney, Austen, Sedgwick, Chopin, Gilman, Foster and Wilson. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course. Ms. Valerio/Offered every other year

#### **ENG134 SURVEY OF WOMEN WRITERS II/LECTURE, DISCUSSION**

Examines developments in British and American prose fiction by women in the 20th century. Authors include Cather, Woolf, Lessing, Rhys, Silko, Morrison, Winterson, Cisneros and Kincaid. Close attention is paid to textual reading and defining, revising and challenging traditional definitions and expectations of women's writing on various levels: thematic, linguistic and formal. The course also addresses current critical approaches to women's writing. For undergraduate English majors and minors this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course. Ms. Valerio/Offered every other year

#### **ENG135 THE SHORT STORY/LECTURE**

This course involves intensive reading of stories that exemplify a variety of fictional methods and affords the student some knowledge of the history of this literary type. Attention will be paid to the international scope of the short story, particularly in the 20th century. For undergraduate English majors, this course satisfies the Genre (B-2) requirement. Mr. Elliott/Offered every year

#### **ENG140 MAJOR BRITISH WRITERS I/LECTURE, DISCUSSION**

The lecture/discussion sequence ENG140-141 takes an historical approach to British literature from the Middle Ages to the dawn of the 20th century. This course concentrates on medieval and early modern English literature (1000-1700); it will examine major works by such authors as Sidney, Spenser, Shakespeare, Donne, and Milton (among others). For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) and Period (C-1a) requirements for majors. Mr. Bastien/Offered every year

#### **ENG141 MAJOR BRITISH WRITERS II/LECTURE, DISCUSSION**

This course examines British literature by major authors from 1700 to the late-19th century in drama, the novel, poetry and prose nonfiction. Texts to be studied will include works by Centlivre, Swift, Defoe, Blake, Wordsworth, Shelley, Dickens, Bronte, Wilde and Conrad. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Ms. Kasmer/Offered every year



**ENG143 TERRIBLE BEAUTY: THE ART OF TRAGEDY/LECTURE, DISCUSSION**

This course examines the historical evolution of tragedy and its central place in Western literary expression. Beginning with the three classical exemplars, Aeschylus, Sophocles, and Euripides, we trace tragedy through Roman closet drama (Seneca), Renaissance masters (Shakespeare) and European interpretations (Racine, Schiller), to both modern experimental tragedy (Miller) and modern attempts to revive the classical model (Eliot). For undergraduate English majors this course satisfies the Genre (B-2) requirement. Mr. Bastien/Offered every other year

**ENG144 DRAMA OF THE WESTERN TRADITION/LECTURE, DISCUSSION**

Surveys the traditional dramatic canon of the western tradition. Course readings will include plays by Euripides, Sophocles, Shakespeare, Webster, Jonson, Molière, Congreve, Sheridan, Ibsen and Beckett (among others). For undergraduate English majors this course satisfies the Genre (B-2) and the Period (C-1a) requirements. Mr. Bastien/Offered every other year

**ENG145 FABULAE: THE GENRE OF ROMANCE/LECTURE, DISCUSSION**

This course examines the tradition of the romance genre, from classical antiquity to the present. Texts read range from early Greek "novels" and Medieval metrical romances, through the Gothic tale and Romantic poetry to contemporary forms such as science fiction, fantasy and horror. Along the way, students will be able to see how the general conservative elements of a given literary form are transmuted to accommodate a number of specific contexts. For undergraduate English majors this course satisfies the Genre (B-2) requirement. Prerequisite: verbal-expression course. Mr. Bastien/Offered every other year

**ENG146 OLIVER TWISTED: THE LITERATURE OF THE FANTASTIC/LECTURE, DISCUSSION**

This course investigates the development of the idea of the fantastic in both modern and postmodern fictions. From the theoretical considerations of such critics as Todorov, we read through texts that exemplify the variegated modes the fantastic can take, from the "ghost story," fantasy, science fiction and fairy tale, to "magical realism," the utopian/dystopian novel and "experimental" fiction. For undergraduate English majors this course satisfies the Genre (B-2) requirement. Mr. Bastien/Offered every other year

**ENG147 MYTHOLOGY/FIRST-YEAR SEMINAR**

What is a myth? Is it something false, illogical, unreal, or otherwise outside of our serious consideration? Or does myth have a viable, seminal, even fundamental, relationship to our lives and how we see the world around us? Does myth function cosmologically? Ontologically? Epistemologically? Aesthetically? That is, does it have a shaping capacity that not only enables us to negotiate the world, but also is responsible in many ways for what we abstract from that world—allowing for a richer, more meaningful existence. This course engages with these questions as it attempts to establish the base and context for myth's relationship to life. We read a number of myths from various cultures (Greek, Norse, Celtic, Native American, among others), as well as texts that reinvigorate mythic sensibilities (poetry, drama, fiction) from the classical world to the contemporary. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Mr. Bastien/Offered periodically

**ENG150 INTRODUCTION TO MEDIEVAL LITERATURE/LECTURE, DISCUSSION**

Introduces western European medieval literature, touching on classical roots and contemporary counterparts in the process. Topics covered may include literary forms (epic, romance), social concerns (religion,

the role of women, politics) and myth. Works read and discussed are selected from Anglo-Saxon, Anglo-Norman, Celtic and Middle English authors, and range from Beowulf and Marie de France's *Lais* to the Gawain-poet and Dante. For undergraduate English majors, this course satisfies the Period (C-1a) requirement. Mr. Bastien/Offered every year

**ENG164 THE NINETEENTH-CENTURY BRITISH NOVEL/LECTURE, DISCUSSION**

This course examines the nineteenth-century British novel, the predominant literary form in mid-to-late nineteenth-century Britain. With specific attention to both literary form and historical contexts, we will explore the ways in which the novel as a genre shaped and was shaped by nineteenth-century British culture, mired in the "woman question," the issue of class, and imperialism. We will then trace the current impact of this form by examining twentieth-century novels and films in conversation with nineteenth-century novels. By surveying these different works, we will develop a coherent theory of nineteenth-century fiction and situate the novel of that time-period within the larger framework of the British literary tradition. For undergraduate English majors this course satisfies the Genre (B-2) requirement. Ms. Kasmer/Offered periodically

**ENG180 MAJOR AMERICAN WRITERS I/LECTURE, DISCUSSION**

The sequence ENG180-181 takes an historical approach to American literature from Puritanism to the present. This course concentrates on early American literature, circa 1620-1860, by authors such as Bradstreet, Rowlandson, Edwards, Franklin, Emerson, Douglass, Dickinson, Whitman, Hawthorne, Melville, Stowe and others. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course recommended. Ms. Roberts/Offered every year

**ENG181 MAJOR AMERICAN WRITERS II/LECTURE, DISCUSSION**

This course traces the evolution of American literature and its major aesthetic movements from circa 1860 to the present. Writers and poets include Melville, Twain, Crane, Wharton, James, Williams, Eliot, Hughes, Cather, Fitzgerald, Hemingway, Faulkner, Pynchon, and Morrison. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course. Ms. Huang/Offered every year

**ENG182 AFRICAN AMERICAN LITERATURE I/LECTURE, DISCUSSION**

Addresses major periods and principal authors of the African American canon. Readings may cover a historical span that could range from the 18th century to the present or could represent focused concern with select authors and/or a given literary movement. Students are expected to gain a historically as well as a culturally contextual appreciation of the literature produced by writers of African descent in the Americas. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Staff/Offered every year

**ENG183 AFRICAN AMERICAN LITERATURE II/LECTURE, DISCUSSION**

Explores the aesthetic modes configuring the evolution of African American literature in the 20th and 21st centuries, especially the novel. Focus is on the experimental and innovative sensibilities regulating the evolving canon of postmodern writing produced by Americans of African descent. Authors studied may include David Anthony Durham, Percival Everett, Minister Faust, Edward P. Jones, Gayl Jones, Jamaica Kincaid, Toni Morrison, John Ridley, Fran Ross, Carl Hancock Rux, Olympia Vernon, Colson Whitehead and Kevin



Young. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Staff/Offered every year

#### **ENG184 AMERICAN POETRY/DISCUSSION**

This course will study a specific period of American poetry. The course will not only aim to make us all better readers of poetry but will also ask a number of contextual questions: How did audiences for and purposes of poetry change in particular time periods? What kinds of poetry have been “canonized” by later academics, and what kinds have not? What is the relationship between politics and poetry? Are cultural expectations formed by poetic expression, or do cultural norms and changes drive poetic innovation? How have conditions of publishing affected the writing of poetry? For undergraduate English majors and minors, this course satisfies the Genre (B-1) requirement. Mr. Bassett/Offered every year

#### **ENG196 STRATEGIC SPEAKING/WORKSHOP**

Centers on oral presentation of current controversial issues and responses to rhetorical dilemmas. Topics include: rhetorical situations and audience analysis; forms of argument in persuasive speaking; supporting arguments with evidence; ethical communication practices; and dialogue processes to achieve better understanding of complex controversial issues. Students prepare 3-4 major speeches and complete a number of exercises. This course carries a Difficult Dialogues designation. Ms. Johnson/Offered every year

#### **ENG202 FEATURE WRITING/WORKSHOP**

An introduction to the art and craft of feature writing. The feature story is a rendering of reality into words, which, when done well, has its feet in both journalism and literature. We will discuss the elements of the feature story, as well as its various types and formats. We will learn how to find and develop stories, how to perform background research on subjects and how to interview. Course work will include reading and discussing feature stories and assigned texts. Students' stories will be read and discussed in class. Prerequisites: verbal-expression course; first-year students by permission. Mr. Dempsey/Offered every year

#### **ENG203 FEATURE WRITING II**

Develops the skills learned in Feature Writing I and leads students toward publication of their work. We will study various outlets for feature stories and hear from editors and writers on breaking into markets. We will examine other forms of writing for techniques such as narrative, description, exposition and dialogue that may be put to use in own work. Libel and ethics will also be covered. Students should expect some demanding assignments. The aim is to produce pieces vibrant with the energy of the real. Prerequisites: Feature Writing I or permission. Not open to first-year students. Mr. Dempsey/Offered every year

#### **ENG204 WRITING FOR MAGAZINES/SEMINAR**

This course is for students who want to learn how to write articles they might actually sell to periodicals. We will emphasize such vital skills as: analyzing the markets, coming up with fresh ideas, slanting to the audience, researching and interviewing, creating killer leads, composing query and cover letters, submitting professional-looking manuscripts, writing to length, meeting deadlines and, especially, writing well. Grades will be based on weekly writing assignments, participation and attendance, and evidence of improvement. Mr. Tapply/Offered every year

#### **ENG205 CULTURE AND THE NEWS/LECTURE, DISCUSSION**

Examines the social, cultural, political and economic factors that go into constructing what we call news in North America and specifically in the United States. This course also examines the “nature” of news media, their purpose, content and uses in late- 20th-century and early-21st-century America. Some of the major questions this course attempts to address include: How is news content determined and by whom and for what reasons? Who “owns” the news? How do news agencies and institutions “cover” local, national and international events and from what perspectives and why? Ms. Stephenson/Offered every year

#### **ENG206 WRITING THE NOVEL I/WORKSHOP**

This course is for students who want to write a novel. In workshop format, we will explore the elements of long fiction (character, plot, theme, setting, etc.), structure and development, writing styles and techniques, and issues such as giving and receiving criticism, revising, and overcoming writer's block. Students will complete a working draft of the first 10,000 words of their novel. They will be encouraged, but not required, to continue working on their novels in ENG207/Advanced Fiction Writing Workshop. For undergraduate English majors, this course satisfies the Genre (B-2) requirement. Mr. Tapply/Offered every year

#### **ENG207 ADVANCED FICTION WRITING/WORKSHOP**

The Advanced Fiction Writing Workshop offers students who are serious about writing fiction—short stories or novels—a supportive seminar setting to present their work for discussion and suggestions, to learn how to critique the writings of others, and to participate in discussions about the art and craft of fiction writing. Open to students who have already taken Creative Writing Workshop Fiction and/or Novel Writing I, or with the permission of the instructor. Mr. Tapply/Offered every year

#### **ENG208 ADVANCED CREATIVE WRITING: POETRY/WORKSHOP**

This course is for students who have already taken a poetry workshop and have a portfolio of revised poems. Students will be expected to use their past experience as critic and writer so as to move more quickly into the process of publication, deeper analysis of classmates' work and assembly of their own cohesive body of work. Each student is expected to write a poem each week and post it on Blackboard. Additionally, each of us will be expected to read the first five poems posted and come to class prepared to discuss the work articulately and constructively. Our objectives in this class are to write better poems, to continue honing our critical skills, to understand and prepare ourselves for publication, and to come to a greater understanding of the ways in which poets and poetry publications work. For English majors and minors this course fulfills the Genre (B-1) requirement. Graded on a credit/noncredit basis only. Staff/Offered every other year

#### **ENG209 WRITING OUT LOUD/WORKSHOP**

This is a course in which students will learn to listen and consider how the application of spoken word and performance strategies can strengthen their written work. Students will write nonfiction prose essays and will be taken through a series of exercises involving a variety of mediums to help facilitate the writer's ear. By semester's end, students will write at least two essays, one of which will be performed in a public setting. A play is unique in that it contains the written word spoken and experienced collectively. Conversely, we read essays privately, in our own space and time. But what if one is to write with the idea that a work will eventually be performed out loud? How is the



writing style and process affected? What methods are used by those who write and deliver prose? What is the difference between the essay that is meant to be read and the essay meant to be spoken? Is there a difference or should there be a difference? Writing Out Loud is not an acting class. It is not a course in public speaking or speech writing. Nor is it a course intended to develop the performance artist. Rather, we feel that techniques employed within these mediums will serve to help writers develop their writing skill. Writing Out Loud is a workshop course designed to help writers listen. The class is by permission only and it is not open to first-year students. Students must submit a portfolio of writing for review. Mr. DiIorio/Offered every other year

**ENG215 LANGUAGE AND CULTURE IN THE UNITED STATES/LECTURE, DISCUSSION**

Using a cultural perspective on language, this course addresses varieties of language use and their consequences in the United States. Topics include demographics and immigration in sociolinguistic perspective; the systematic nature of language; language and culture of Native Americans, African Americans, Asian Americans, Hispanic Americans; gender patterns in language; bilingualism and multilingualism in the United States; and the policy implications of language diversity. As a Dialogue-oriented course, key issues that engage dimensions of language in relation to race, ethnicity, and immigration will be explored through structured dialogue processes. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Ms. Johnson/Offered every year

**ENG229 PLAYWRITING**

See Theater Arts 230.

**ENG230 SOUTHERN WRITERS OF THE 20TH CENTURY/SEMINAR**

Much of the best writing in the United States in the 20th century came out of the South, a section that is quite diverse economically, demographically, politically and culturally, and a region that changed a great deal during that century. Because of sectional conflict, the Civil War and the Reconstruction experience, it is also the region most self-conscious about itself as a region. Study of some of the strongest writers provides an opportunity for rewarding examination of relationships among social, racial, economic and literary factors, as well as an opportunity to compare literary features of their works with those of writings from other parts of the country. Focus is on writers working between the 1920s and the early 1960s, a period sometimes called the Southern Renaissance. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Bassett/Offered periodically

**ENG231 WILLIAM FAULKNER/SEMINAR**

This course will focus on the Yoknapatawpha fiction of William Faulkner, those novels and stories set in "the little postage stamp of native soil" that he created and developed over more than three decades. As probably the strongest American novelist of his generation, certainly the one most clearly canonical, Faulkner invites consideration from many perspectives and, indeed, his fiction has been the chosen subject for some very good commentary by critics and scholars of almost every poststructuralist, as well as more traditional perspective. We will consider Faulkner as Modernist, as American writer, as Southerner and in any other way our discussion leads us. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Bassett/Offered periodically

**ENG235 ADVANCED PLAYWRITING WORKSHOP**

See Theater Arts 235.

**ENG237 ASIANS AND JEWS IN THE UNITED STATES/LECTURE, DISCUSSION**

Relying on sociology, history, fiction, and memoir, this interdisciplinary course seeks to explore the complexities of race and ethnic relations through a comparative examination of two ethnic groups: Asian Americans and Jewish Americans. While there are clear racial and cultural distinctions between Asians and Jews, the two groups share many points of commonality in their respective histories as ethnic minorities in the U.S. Why, for example, are Chinese, East Indians and Jews concentrated in business in context after context? How can we understand the rapid climb of American Jews and members of many Asian groups up the economic ladder? What are the problems associated with the coalitional politics that prompted the creation of pan-Asian and pan-Jewish identities out of vastly different diasporic populations? What are the implications of the fact that both groups today share identical intermarriage rates (50 percent)? Why do Asian Americans and Jewish Americans bear the dubious mantle of the "model minority"? How do they continue to contend with longstanding social and political invisibility within the reductive black/white paradigm of American racial politics? Despite the numerous similarities between the two groups, there is a lack of scholarship that explicitly compares Asians and Jews. Together we will attempt to fill this void by exploring more fully the intricacies and broader implications of these similarities and differences. Our goal is to arrive at a more comprehensive understanding of the connections between Asian American and Jewish American experiences, and to explore what such connections can tell us about the unique roles the two groups play in U.S. ethnic history and identity politics. For undergraduate English majors this course satisfies the Period (C-3) requirement. Ms. Huang, Ms. Tenenbaum/Offered periodically

**ENG239 ALIENS AND OTHERS IN SCIENCE FICTION/SEMINAR**

This course examines literary figurations of "the alien" in science fiction, with specific focus on the subgenre of "first contact" narratives. Analyses of the genre will take critical and theoretical approaches to investigate constructions of otherness and difference, as well as critiques of the discourses and histories of humanism, colonialism, slavery, and identity politics. Short fiction and novels by H.G. Wells, Arthur C. Clarke, Ursula Le Guin, Philip K. Dick, Stanislaw Lem, Samuel R. Delany, Orson Scott Card, Octavia E. Butler, among others, will be read. Feature films and television series that deal with alien contact will also be studied. For undergraduate English majors this course satisfies the Period (C-3) requirement. Ms. Huang/Offered periodically

**ENG240 LITERARY ANALYSIS AND CRITICAL METHODS/SEMINAR**

Examines the primary movements in 20th-century European and American literary criticism. Beginning with Russian Formalism and continuing with New Criticism, Structuralism, Deconstruction, and New Historicism, this course investigates the critical theories and philosophical assumptions that have directed contemporary literary studies away from mere explication toward a concern with the epistemological, cultural and ideological groundings of the text. Practical application of critical strategies is stressed. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Staff/Not offered 2008-2009

**ENG245 MYTHOPOETICS/SEMINAR**

This course examines modes and qualities of literary expression where we will find that narratives and poetry convey different expectations, which are also embedded in a variety of world views. Frequently, how-



ever, authors will attempt to craft these expectations and world views to accommodate nontraditional visions. Toward this end, we will read works by authors who strive to come to grips with their own experiences of the world. Texts will include Eliot's "The Waste Land," Woolf's "The Waves," Plath's "Ariel," Joyce's "Portrait" and representative poems by Stevens and Yeats. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Mr. Bastien/Offered every other year

#### **ENG248 CONTEMPORARY LITERARY THEORY/SEMINAR**

Investigates and develops several theoretical approaches to literature in the late-20th century, attempting to provide glimpses into the range of theoretical issues and concerns. We look particularly at identity formation in contemporary literary, political, economic, cultural and social arenas. May also look at a literary text in relation to theory. General areas of study are selected from among the following: textual criticism, new criticism, psychoanalysis/reader response, structuralism, poststructuralism, feminism, postcolonialism, postmodernism, gay and lesbian theory. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Mr. Elliott/Offered every year

#### **ENG249 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR**

Approaches semiotic theories comparatively from historical as well as theoretical points of view and practices them by drawing on literature, film, advertising, and drama. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Ms. Gertz/Offered periodically

#### **ENG250 MEDIEVAL LITERATURE/SEMINAR**

Explores medieval literary culture of Western Europe by means of literary theoretical and classical texts. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Themes vary each year, and the seminar can be taken more than once for credit, as long as each time a different theme is chosen. Ms. Gertz/Offered periodically

#### **ENG251 CHAUCER/SEMINAR**

Guides the student through "The Book of the Duchess," "The House of Fame," "The Parlement of Fowls," some "Canterbury Tales" and/or "Troilus and Criseyde." All texts are taught in Middle English, and selections may vary. No prior knowledge of Middle English required. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Ms. Gertz/Offered periodically

#### **ENG252 CULTURAL DISCOURSES OF ADVERTISING/SEMINAR**

Focuses on the ways in which discourse elements in advertising draw upon, circulate, and create new cultural codes. Patterns and codes of "discourse imaging" that structure ads are explored in the context of verbal and visual properties, intertextualities, and ideology. Through the perspective of Critical Discourse Analysis, emphasis is given to the relationship of advertising discourse to larger cultural discourses and their consequences. For undergraduate English majors, this course satisfies the Theory or Criticism (D) requirement. Prerequisite: COMM101. Ms. Johnson/Offered every year

#### **ENG253 ADVANCED STUDIES IN SHAKESPEARE/SEMINAR**

Explores recent trends in research and criticism of Shakespeare's texts. We will study ten plays; texts, topics, and focus vary from year to year, but include feminist and new historicist interpretations, performance criticism and theater history. For undergraduate English majors this

course satisfies the Period (C-1b) requirement. Prerequisite: ENG120 or TA214. Ms. Vaughan/Offered every year

#### **ENG254 STILL SPACES—EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR**

This course aims to explore and gain experience of contemplative practices as they have evolved in both European and Asian cultures. In addition to reading and writing about key texts that engage the "still space," outside the classroom students will participate in a yoga course for seven weeks. The concepts of "ki" (centeredness) and "tao" (the way) will be probed through the tools of the metaphor and the narrative. For undergraduate English majors this course satisfies the Period (C-1b) requirement. Ms. Gertz/Offered periodically

#### **ENG255 STUDIES IN THE RENAISSANCE/SEMINAR**

Explores the poets, playwrights and prose writers who shaped the English literary Renaissance. Authors may include More, Sidney, Spenser, Marlowe, Wroth, Donne, Shakespeare, Cary, Herbert, Jonson, Middleton and Webster. Their writings are placed in the gendered sociopolitical context of the 16th and 17th centuries. For undergraduate English majors this course satisfies the Period (C-1b) requirement. Prerequisite: permission of the instructor. Ms. Vaughan/Offered every other year

#### **ENG256 SHAKESPEARE FROM PAGE TO STAGE/LECTURE, WORKSHOP**

Using four major plays, this course will provide historical context for understanding Shakespeare's texts, exposure to close analysis of Shakespeare's language (from both poetic and performance perspectives), as well as experience in acting Shakespearean roles. Students will be required to rehearse and perform scenes and monologues from four plays. Simultaneously, students will explore the texts' historical contexts, looking in particular at early modern constructions of gender, kinship, social status and race. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Ms. Vaughan and Mr. Dilorio/Offered periodically

#### **ENG257 LANGUAGE AT ISSUE/SEMINAR**

Centers on current language policy issues in the United States. Focuses on issues such as speech codes, bilingual education, policies that dictate "English Only" in the workplace and other situations, language translation in the legal process, and efforts to make English the official language of the United States. Issues are considered from the perspective of academic scholarship, media representations, legislative actions, and legal decisions. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Ms. Johnson/Offered every other year

#### **ENG259 FUTURING THE NEWS/SEMINAR**

This project-oriented course will explore prospects for the future of news consumption, especially newspapers and their publishers. Grounded in analysis of demographic trends (age, race/ethnicity) in news consumption and critical analyses of news formats and sources, the focus will be on current practices for selecting and accessing news and on the prospects for promoting "news literacy" in the future. Projects will focus on assessments of news preferences, mock-ups of news formatting, roles for local and national/international news, and modes for news delivery in the context of technological innovations. Ms. Johnson/Offered periodically

**ENG260 STUDIES IN 18TH CENTURY BRITISH LITERATURE/SEMINAR**  
***MAKING GENDER IN THE 18TH-CENTURY NOVEL***

Gender roles became more clearly defined in the eighteenth century. This course traces the construction of masculinity and femininity through the discourses of sexuality, sensibility, and sociability in the eighteenth-century British novel. Through contemporary theory on the construction of subjectivity, sexuality and gender, we will examine the popular forms of the 18th-century novel—adventure, domestic, romance, and pornographic—to understand the ways in which these texts helped to shape perceptions of gender socially and culturally. A student may take this seminar more than once, as long as the topic for the course is different. For undergraduate English majors this course satisfies the Period (C-2) requirement. Ms. Kasmer/Offered every other year with different topics

**ENG262 STUDIES IN 19TH CENTURY BRITISH LITERATURE/SEMINAR**  
***JANE AUSTEN IN HOLLYWOOD***

This course will consider the current cultural impact of the novels of Jane Austen, one of the most important novelists of the Regency period. We will read these works with attention to historical time-period, Austen's contemporaries' views, and recent literary criticism to place Austen's work within the context of its intellectual, literary, and cultural history. The course will concentrate on the intersection between Austen's novels and contemporary film adaptations to examine the ways in which her work has been incorporated into contemporary society. A student may take this seminar more than once, as long as the topic for the course is different. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer/Offered every year with different topics

**ENG263 BRITISH ROMANTIC LITERATURE: RACE AND IMPERIALISM IN ROMANTICISM/SEMINAR**

The period from the end of the 18th century to the mid-19th century was one of great expansion and empire building for England, but at what cost? In 1772, after the Mansfield Judgment proclaimed that England was "a soil whose air is deemed too pure for slaves to breathe in," the issue of slavery, as well as the issue of British identity, became particularly contested. This course will examine issues of slavery and colonial rule, as well as the ideals of political and social freedom, through the narratives of former slaves; the texts of authors, such as Mary Shelley, Jane Austen, and Thomas De Quincey; and Romantic poetry. Through these works, we will look at the ways in which race and imperialism impacted attitudes towards Englishness during the period, in particular, notions of English womanhood. To understand the cultural context of race and imperialism, the course will incorporate post-colonial criticism, as well as cultural and historical documents. For undergraduate English majors this course satisfies the Period (C-2) requirement. Ms. Kasmer/Offered every other year

**ENG265 VICTORIAN LITERATURE/SEMINAR**

Authors studied may include Charles Darwin, Charles Dickens, Alfred Tennyson, John Stuart Mill, Charlotte Brontë, Thomas Hardy and Oscar Wilde, as well as less familiar but important people such as Henry Mayhew and Harriet Taylor. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer/Offered periodically.

**ENG269 TRANSGRESSION AND POLICING: EIGHTEENTH-CENTURY CULTURE AND SOCIETY/SEMINAR**

In Britain and France, the 18th century was a time of momentous and uneasy transformation. Political, economic, social and scientific shifts undermined old political systems, as well as hierarchies of rank and gender. In every way, Europeans were overstepping the boundaries that had, at least in theory, defined

their reality for preceding centuries. As old norms were threatened, efforts were made to carefully "police" political and social acts. Essential to this policing was the redefinition of what was considered transgressive. Using an interdisciplinary approach that will combine the study of history and literature, this course will examine the social, cultural, political and intellectual developments of 18th-century Britain and France through the lens of policing and transgression. We will explore the conditions that defined these movements as transgressive and track how forces of policing and change together created new norms. Students will read historical monographs, literature and other primary sources, which will be interpreted both as literature and as historical evidence. Prerequisite: Permission of instructors. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer, Ms. Kushner/Offered periodically

**ENG272 RADICAL THOUGHT AND THE BLACK ARTS MOVEMENT, 1966 TO 1976/SEMINAR**

The Black Arts Movement remains the most radical realization of a literary culture in the history of the United States. Resulting from centuries of racial oppression, this movement is to be understood as black Americans' revolutionary use of art to express deep-seated existential rage and political critique in order to generate social change and psychological reconstruction. Accordingly, this course will examine the historical factors responsible for the emergence of the Black Arts Movement and will pay special attention to the thinkers and writers responsible for the articulation of its aesthetic manifestos and the production of its literary canon. Individuals to be studied include Amiri Baraka, Ed Bullins, Hoyt Fuller, Marie Evans, Addison Gayle, Carolyn F. Gerald, Nikki Giovanni, Sam Greenlee, William Melvin Kelley, Etheridge Knight, Haki Madhubuti, Larry Neal, Sonia Sanchez, and John A. Williams. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Staff/Not offered 2008-2009

**ENG275 FICTIONS OF EMPIRE: STUDIES IN GLOBAL ENGLISH LITERATURE/SEMINAR**

This seminar provides an introduction to contemporary global literature in English. The writers we will discuss come from very different backgrounds—from South Asia to Africa to the Caribbean—but they are all engaged with making sense of the legacy of colonialism and the emergence of something we might call global culture. These texts are exciting stylistically because of their inventive uses of language and narrative structure: their experiments with form capture the sense of new nations coming into being, new approaches to cultural tradition, and the new status of English as a global language. The stories they tell entertain while also providing original perspectives on histories of empire marked by political struggle, violent conflict, and global inequalities. Our readings will range from mid twentieth-century writings from the so-called "Third World" that tried to imagine a "third" alternative to the dualistic parameters of the Cold War, to more recent works that challenge and revise colonial conceptions of race and nation, gender and sexuality, and ethnicity and cultural difference. Topics we will consider include: the idea of the "postcolonial"; the



relationship between literature and political resistance; the transformation of metropolitan English writing and language; "subalternity" and problems of representation; writing from a position of displacement, exile, and diasporization; and the persistence of colonial narratives in contemporary forms of imperialism. The specific focus of this course will change from year to year, but authors to be discussed may include Salman Rushdie, Arundhati Roy, Amitav Ghosh, Chinua Achebe, Buchi Emecheta, J.M. Coetzee, Jamaica Kincaid, V.S. Naipaul, Anita Desai, Derek Walcott, and Zadie Smith. For English majors, this course satisfies the Period (C-3) requirement. Mr. Levin

**ENG276 ETHNIC AMERICA: LITERARY AND THEORETICAL PERSPECTIVES/SEMINAR**

This seminar investigates the ways in which the "American" and the "ethnic" continue to be perceived as mutually exclusive identity categories in contemporary U.S. fiction. Despite the nation's longstanding history as a nation of immigrants and its forecasted future as the most multiethnic and multilingual country in the world, the U.S. continues to resist the incorporation of its ethnic populations through overt and covert means of division, estrangement, and discrimination. Students will read a wide range of texts by "ethnic" and "nonethnic" writers and theorists to explore the ways in which the nation's ethnic constituents are continually changing the definitions of its national identity, and to consider whether the American/ethnic dichotomy is real or imagined. For undergraduate English majors this course satisfies the Period (C-3) requirement. Ms. Huang/Offered periodically

**ENG277 RACE AND GENDER IN AFRICAN AMERICAN LITERARY THEORY/DISCUSSION**

Covering the development of African American literary theory from the 1970s to the present, this course examines the ways in which prevailing assumptions of race, gender and sexuality have influenced contemporary African American critical theorists concerning their speculations on literature and culture. Various movements represented by these theorists include cultural nationalism, structuralism, feminism, deconstruction, new historicism and queer studies. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Staff/Not offered 2008-2009

**ENG278 CONTEMPORARY BRITISH LITERATURE, CULTURE AND FILM**

This course explores British literary and visual culture following the political, economic, and social upheavals after World War II. Marked by Britain's declining geopolitical significance, the trauma of the war, and the dissolution of the empire overseas, this period precipitated a crisis of national confidence while opening up new possibilities for defining the "imagined community" of England. We will examine the many aesthetic responses to this era of transition, from nostalgic efforts to reassert a sense of authentic nationhood to new social movements that point to alternative forms of solidarity and community. Topics we will examine include the confluence of race and nationalism; a new emphasis on individual identity and authentic selfhood; the emergence of youth movements and subcultures; the challenges posed by writers from the former colonies; the use of new narrative techniques to respond to realism and modernism. We will explore novels, poetry, music and film profoundly influenced by the legacy of war, new immigration, dramatic shifts in gender and sexual politics, class conflict and deindustrialization, and the potential break-up of Britain. Consideration of these texts, and of the cultural studies movement itself, will serve as the basis for discussions on the ways that literary,

popular, and political culture register, and refashion, deeply contested debates regarding the meaning of Englishness. Readings will be drawn from such authors as Anthony Burgess, Kingsley Amis, Ian McEwan, Jamaica Kincaid, Jeanette Winterson, Zadie Smith, Kazuo Ishiguro, and Pat Barker, and Salman Rushdie. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Levin/Offered every year

**ENG279 FICTIONS OF ASIAN AMERICA/SEMINAR**

With particular emphasis on the multiple meanings of "fiction," this seminar examines the ways in which the Asian American identity is constructed, imagined and contested in American literature and popular culture. Analyses will focus primarily on how texts and films produced within the last decade maintain or challenge established boundaries of the Asian American identity. Specific issues to be investigated include the model minority discourse and the demands of assimilation and citizenship; ethnic authenticity and hybridity; gender roles and sexual anxieties; cultural memory and nostalgia; and the commodification of Asian cultures and identities. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Ms. Huang/Offered every other year

**ENG281 AMERICAN LITERARY RENAISSANCE/SEMINAR**

Special topics in 19th-century literature through the Civil War invite in-depth consideration of how extraordinary cultural, political and technological changes made this one of the most vibrant and studied periods of the American literature. If taken at the undergraduate level, prerequisite: Major American Writers I or permission of the instructor. For undergraduate English majors this course satisfies the Period (C-2) requirement. Ms. Neuman/Not offered 2008-2009

**ENG282 STUDIES IN 19TH-CENTURY AMERICAN LITERATURE/SEMINAR**

An historical analysis of canonized and noncanonized American works from the second half of the 19th century. Historical contexts will be examined to explore the progression of interpretations directed at these works up to the present time. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Mr. Elliott/Offered periodically

**ENG283 VISIONS OF REPRESENTATION: 1860-1920/SEMINAR**

Explores the problematic assumptions of literary representation underlying American realism through selected works of American writers. Conventional interpretations of realist writing are often challenged by issues of race, class, gender and cultural contexts. Examines works by Twain, Howells, James, Dreiser, Jewett, Cather, Cooke, Chopin and others. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Mr. Elliott/Offered every other year

**ENG284 TOPICS IN 17TH- AND 18TH-CENTURY AMERICAN LITERATURE/SEMINAR**

Special topics in the earliest periods of American letters provide a broad historical foundation for literary study in all fields as well as the opportunity for in-depth investigation of critical issues of colonial and early Republic culture such as gender, race, religious discourse, scientific progress and political contest. If taken at the undergraduate level, prerequisite: Major American Writers I or permission of the instructor. A student may take this seminar more than once, as long as the topics differ each time. For undergraduate English majors this course satisfies the Period (C-2) requirement. Ms. Neuman/Not offered 2008-2009

**ENG290 CAPSTONE/SEMINAR**

The capstone's purpose is to deepen and broaden each senior major's knowledge and interpretive skills. We will spend time on the aspects of literature that the department feels every major should know. Throughout the semester, each student will work on a paper of his or her choosing (e.g., a research paper for another seminar, a part of an honor's thesis). Shakespeare's "Hamlet" will be the touchstone text for 2008. For undergraduate English majors, this course satisfies the Capstone (E) requirement. Seniors only. Ms. Vaughan/Offered every fall

**ENG291 LITERATURE OF THE HARLEM RENAISSANCE/SEMINAR**

Addresses the momentous development of African American literary culture from roughly 1920 to 1935. This course explores the antecedent cultural forces of 19th century Americas as well as the modernistic discourse of early 20th century America in order to contextualize and appraise the major and minor figures of the Harlem Renaissance. This course will also examine those little known Harlem Renaissance women writers who publications have remained largely forgotten. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Staff/Not offered 2008-2009

**ENG294 HISTORY OF THE ENGLISH LANGUAGE/ SEMINAR**

Examines changes in English mainly during the Anglo-Saxon and medieval periods. In addition to learning phonological and grammatical characteristics of the language during each period, the student examines language as a mirror of culture. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Ms. Gertz/Offered periodically

**ENG295 GENDER AND DISCOURSE/SEMINAR**

Focuses on how cultural conceptions of gender guide language use for males and females and on ways in which discourse in its cultural context constructs gender. The implications for language use of ideology, enculturation and socialization patterns, dominance and inequality, and cultural diversity are considered. Both theory and research are covered and students conduct their own research projects. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Ms. Johnson/Offered every other year

**ENG297 HONORS IN ENGLISH: SENIOR YEAR**

Invited and interested students should identify an area of interest with an adviser and apply in writing to the department chair with a brief description of the project before the beginning of the senior year. Honors in English normally carries two credits. With the adviser's approval, students should register as ENG297 Honors in English for one credit in each of the two semesters of their senior year. The adviser and the student will agree on the project's stages. However, the department requires that a completed draft be turned in by the first day of the spring semester to the adviser. The final thesis is due three weeks before the last day of the spring semester classes. The department requires one copy of the final thesis. A second reader, chosen by the student and the adviser, participates in the final evaluation. Details are available in the handbook for English majors. Staff/Offered every year

**ENG298 INTERNSHIPS**

Offered for variable credit. Staff

**ENG299 DIRECTED STUDY**

When asking a faculty member to sponsor directed study courses (299), the student should: 1) demonstrate competence to deal with the materials as literature and 2) present a well thought-out proposal.

The student must take the initiative in selecting readings or carrying out the special project. Offered for variable credit. Staff

**ENG300 PEDAGOGY I**

A one-on-one with a departmental faculty member on pedagogy. TAs only.

**ENG301 PEDAGOGY II**

An advanced one-on-one with a department faculty member enabling the graduate student to acquire expertise in teaching. TAs only. Prerequisite: ENG300

**ENG302 PEDAGOGY III**

For second-year graduate students who have been awarded a teaching assistantship. Advanced mentoring and classroom assignments as arranged with individual department faculty members. Information available from the chair. Prerequisite: ENG300 and ENG301.

**ENG303 PEDAGOGY IV**

A continuation of ENG302. See its listing for a complete description.

**ENG330 SOUTHERN WRITERS OF THE 20TH CENTURY/SEMINAR**

See English 230.

**ENG331 WILLIAM FAULKNER/SEMINAR**

See English 231.

**ENG337 ASIANS AND JEWS IN THE UNITED STATES/LECTURE, DISCUSSION**

See English 237.

**ENG339 ALIENS AND OTHERS IN SCIENCE FICTION/SEMINAR**

See English 239.

**ENG340 INTRODUCTION TO GRADUATE STUDY IN ENGLISH/SEMINAR**

Examines certain fundamental aspects of literary theory and the history of literary criticism. As a consequence, the course considers the nature of and relationships among the three principal areas in the discipline—bibliography and textual analysis, literary history, and literary criticism emphasizing theory. M.A. candidates not specifically exempted are required to take this course. Seniors by permission of the instructor. Mr. Elliott/Offered every fall semester

**ENG341 LITERARY ANALYSIS AND CRITICAL METHODS/ SEMINAR**

See English 240.

**ENG342 GRADUATE SEMINAR: SPECIAL TOPICS**

Each year the English Department offers a graduate seminar on a topic related to the research interests of one of our faculty. Ideally, participants will find ways to use the methods and scholarship modeled in the class to enrich their own thesis work. The seminar is open to students in the English masters program and to graduate students in other departments as well. Topic and instructor for 2008-09 to be announced.

**ENG345 MYTHOPOETICS/SEMINAR**

See English 245.

**ENG348 CONTEMPORARY LITERARY THEORY/SEMINAR**

See English 248.

**ENG349 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR**

See English 249.

**ENG350 MEDIEVAL LITERATURE/SEMINAR**

See English 250.

**ENG351 CHAUCER/SEMINAR**

See English 251.



**ENG353 ADVANCED STUDIES IN SHAKESPEARE/SEMINAR**

See English 253.

**ENG354 STILL SPACES-EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR**

See English 254.

**ENG355 STUDIES IN THE RENAISSANCE/SEMINAR**

See English 255.

**ENG356 SHAKESPEARE FROM PAGE TO STAGE/LECTURE, WORKSHOP**

See English 256.

**ENG357 LANGUAGE AT ISSUE/SEMINAR**

See English 257.

**ENG360 STUDIES IN 18TH-CENTURY BRITISH LITERATURE/SEMINAR**

See English 260.

**ENG362 STUDIES IN 19TH-CENTURY BRITISH LITERATURE/SEMINAR**

See English 262.

**ENG363 BRITISH ROMANTIC LITERATURE: RACE AND IMPERIALISM IN ROMANTICISM/SEMINAR**

See English 263.

**ENG365 VICTORIAN LITERATURE/SEMINAR**

See English 265.

**ENG369 TRANSGRESSION AND POLICING: EIGHTEENTH-CENTURY CULTURE AND SOCIETY/SEMINAR**

See English 269.

**ENG372 RADICAL THOUGHT AND THE BLACK ARTS MOVEMENT, 1966 TO 1976/SEMINAR**

See English 272.

**ENG375 FICTIONS OF EMPIRE: STUDIES IN GLOBAL ENGLISH LITERATURE/SEMINAR**

See English 275.

**ENG376 ETHNIC AMERICA: LITERARY AND THEORETICAL PERSPECTIVES/SEMINAR**

See English 276.

**ENG377 RACE AND GENDER IN AFRICAN AMERICAN LITERARY THEORY/DISCUSSION**

See English 277.

**ENG378 CONTEMPORARY BRITISH LITERATURE, CULTURE AND FILM**

See English 278.

**ENG379 FICTIONS OF ASIAN AMERICA/SEMINAR**

See English 279.

**ENG381 AMERICAN LITERARY RENAISSANCE/SEMINAR**

See English 281.

**ENG382 STUDIES IN 19TH-CENTURY AMERICAN LITERATURE/SEMINAR**

See English 282.

**ENG383 VISIONS OF REPRESENTATION: 1860-1920/ SEMINAR**

See English 283.

**ENG384 TOPICS IN 17TH- AND 18TH-CENTURY AMERICAN LITERATURE/SEMINAR**

See English 284.

**ENG390 DEPARTMENTAL COLLOQUIUM**

Provides graduate students with guidance, expertise and resolution for the writing of the master's thesis. The chief requirement is an oral presentation, ordinarily given in the student's final semester of course

work. Participation and registration are required; however, the colloquium does not carry course credit and is not included as one of the eight courses needed to fulfill M.A. requirements. Ms. Gertz/Offered every semester

**ENG391 LITERATURE OF THE HARLEM RENAISSANCE/SEMINAR**

See English 291.

**ENG394 HISTORY OF THE ENGLISH LANGUAGE/SEMINAR**

See English 294.

**ENG395 GENDER AND DISCOURSE/SEMINAR**

See English 295.

**ENG397 MASTER'S THESIS**

Prerequisite: permission of the thesis adviser. Staff/Offered every semester

**ENG398 GRADUATE INTERNSHIPS**

Staff/Offered for variable credit

**ENG399 GRADUATE DIRECTED STUDY**

Staff/Offered for variable credit

**IDND018 EXPOSITORY WRITING/WORKSHOP**

Centered on student writing, this course teaches the writing process, emphasizing revision. Students write informal exercises and essays. This course is required of some students. Staff/Offered every semester

**IDND022 WRITING/TOPICS WORKSHOP****WRITING THE BEATS**

The Beat Generation's influence on American culture is still evident today, over 50 years after a group of young men—Jack Kerouac, Allen Ginsberg, William S. Burroughs and others—first met in New York City. These radical writers shook up the literary world with their disregard for traditional literary styles and themes and their blatant rejection of the cultural values of postwar America. This class will introduce students to the major writers and works of the Beat Generation, focusing particularly on the following: notions of defiant individuality; alternative conceptions of religion, sexuality, and politics; the glorification the drug culture and of criminality; and how pop culture factors into the texts. Among the works studied in this class are Jack Kerouac's *On the Road*, Allen Ginsberg's "Howl," and William S. Burroughs' *Naked Lunch*. Fulfills the Verbal Expression requirement. Ms. Plante/Offered every year

**SENSE OF PLACE: WRITINGS OF PLACE AND NATURE**

"It is not down in any map; true places never are," Herman Melville wrote in "Moby Dick." We are increasingly disconnected from the spirit of the natural world and our sense of place in this burgeoning technological age. The goal of this course is to reawaken our inherent connection to the earth, and place, in order to help us see the world more clearly and understand it more deeply. We will study "nature writing" by those who have a special connection to the earth anchored a certain place—from Emerson and Thoreau to contemporary authors. As time permits we will conduct field studies, a film study, and be visited by an author. This course will explore what place can teach us, how it shapes our vision and sense of self along with our world view. Through reading and discussing essays, poems, and works of nonfiction, we will learn how we can be more aware of the world that sustains and surrounds us. Writing for this class will include creative pieces as well as analytical essays, and there will be a final project addressing a place of your choosing. Jessica Bane Robert

## Program Faculty

John Baker, Ph.D. - *Director*  
 Frederick Greenaway, Ph.D. - *Steering Committee Chair*  
 Charles Agosta, Ph.D.  
 Halina Brown, Ph.D.  
 Patrick Derr, Ph.D.  
 Timothy Downs, D.Env.  
 J. Ronald Eastman, Ph.D.  
 Jody Emel, Ph.D.  
 William Fisher, Ph.D.  
 Susan Foster, Ph.D.  
 Karen Frey, Ph.D.  
 Jacqueline Geoghegan, Ph.D.  
 Robert Goble, Ph.D.  
 Dale Hattis, Ph.D.  
 David Hibbett, Ph.D.  
 Dominik Kulakowski, Ph.D.  
 Laurence A. Lewis, Ph.D.  
 Todd Livdahl, Ph.D.  
 Yelena Ogneva-Himmelberger, Ph.D.  
 Colin Polsky, Ph.D.  
 Robert Gilmore Pontius Jr, Ph.D.  
 Samuel Ratick, Ph.D.  
 Deborah Robertson, Ph.D.  
 Dianne Rocheleau, Ph.D.  
 John Rogan, Ph.D.  
 Joseph Sarkis, Ph.D.  
 Jennie Stephens, Ph.D.  
 Christopher Williams, Ph.D.

## Program Overview

The interdisciplinary environmental science major introduces students to physical, biological, geographical and policy aspects of the natural environment. Following a set of common core courses, majors choose one of three tracks: Earth System Science, Environmental and Conservation Biology, or Environmental Science and Policy. The major provides training for those who want to continue on to graduate school or establish management, fieldwork, or laboratory careers in areas as diverse as ecology; conservation biology; teaching; environmental planning, protection, or regulation; water or air monitoring; and policy development.

Advanced students are encouraged to undertake directed research or internships and may do a senior project for honors. Environmental science faculty come from a wide range of Clark's departments. Most are from Biology, Geography, and International Development, Community and Environment, but faculty with environmental interests are also to be found in departments as diverse as Chemistry, Economics, Government, Management, Philosophy, and Physics. Many of the research faculty of Clark's George Perkins Marsh Institute are also contributors to the ES major.

## Undergraduate Requirements

Clark environmental science majors may elect to concentrate in one of three areas: Earth Systems Science, Environmental and Conservation Biology, and Environmental Science and Policy.

Students who have clearly developed interests in environmental science when they arrive at Clark may be interested in satisfying some of their perspectives with environmentally relevant perspective courses.

## Environmental and Conservation Biology Track

Environmental biologists explore the ways in which organisms evolve and interact with one another and their environments. Levels of exploration can range from molecular evolution and genomics to ecosystem level function. Conservation biology makes up one component of this field, focusing on the biological knowledge necessary to preserve biodiversity. Because the loss of biodiversity has reached crisis proportions, we offer a focused curriculum that enables students to bring appropriate biological tools and knowledge to efforts to develop conservation strategies and policies.

This track is designed to provide this focus and to allow students to design a curriculum that will prepare them for research and teaching in environmental and conservation biology. The environmental and conservation track carries the following requirements. We recommend that students interested in obtaining both a strong background in environmental and conservation biology and policy consider completing this track and then the accelerated B.A./M.A. degree in environmental science and policy.

### Environmental Science Core Courses (3)

These courses are intended to provide all students in the environmental science major with a common, general background and vocabulary in environmental science:

BIOL103 Principles of Environmental and Conservation Biology  
 Either BIOL101 and 102 or BIOL100 and 102 count as a substitute for 103.  
 EN101 Sustainability Science: Environment, Society and Technology  
 GEOG104 Earth System Science

### Chemistry (2)

CHEM101, 102 Introduction to Chemistry I and II  
 CHEM103 Accelerated Introductory Chemistry may substitute for these two courses

### Mathematics and Statistics (2)

These pairs of courses offer students requisite mathematical and statistical skills for the discipline. The second statistics course must be approved by the ECB track adviser.

MATH 120, 121 Calculus I and II *or*  
 MATH 120 and either BIOL 106 Quantitative Methods in Biology *or* GEOG 110 Introduction to Quantitative Methods *or*  
 two statistics courses (e.g., GEOG 110 and GEOG 247  
 Intermediate Quantitative Methods in Geography or BIOL 106 and GEOG 247.)

### Biology Core Courses (4)

These courses provide students with the knowledge needed for more advanced study in the field.

BIOL102 Introductory Biology II  
 BIOL105 Evolution  
 BIOL118 Genetics  
 BIOL216 Ecology

### Research Course in Biology (1)

These are courses that provide students with intensive research experiences that will enable them to develop the background needed to design and carry out their own research. With prior approval, courses in field programs may also satisfy this requirement.



BIOL201 Ecology of Atlantic Shores  
 BIOL219 Physiological Ecology of Marine Algae  
 BIOL224 Ecology of Disease Vectors  
 BIOL242 Animal Behavior  
 BIOL254 Molecular Systematics and Evolution

### **Seminar Course in Biology (1)**

Seminar courses provide students with the opportunity to develop the ability to read and evaluate original literature and to develop verbal presentation and discussion skills at the same time they are exploring a new field of biology.

BIOL217 Ecology of Infectious Diseases  
 BIOL223 Topics in Marine Biology  
 BIOL243 Seminar in Evolution  
 BIOL252 Seminar in Mycology  
 BIOL256 Biology of Symbiosis  
 BIOL258 Conservation Biology

### **Natural Science Electives (1)**

Selection of one or more courses from this list will enable students to broaden their backgrounds in environmental and conservation biology. This is not an exhaustive list. The ES director can approve other courses. Courses listed under research or seminar course option can also fulfill this elective.

BCMB271 Biochemistry I  
 BIOL110 Introduction to Botanical Diversity  
 BIOL114 Marine Biology  
 BIOL116 Forest Ecology  
 BIOL180 Introduction to Fungal Biology  
 BIOL220 Population Biology  
 BIOL244 Biological Clocks  
 BIOL302 Applied Ecology  
 CHEM131 Organic Chemistry  
 CHEM142 Environmental Chemistry  
 EN120 Discovering Environmental Science  
 EN241 Environmental Toxicology  
 GEOG102 Understanding Weather  
 GEOG114 Geomorphology  
 GEOG115 Introduction to Hydrology  
 GEOG190 Raster GIS  
 GEOG200 Land Degradation  
 GEOG232 Landscape Ecology  
 GEOG282 Advanced Remote Sensing  
 GEOG293 Introduction to Remote Sensing  
 PHYS110 Introductory Physics I

### **Courses in Environment and Society (2)**

Selection of courses from this list will provide students with initial insights into the mutual impacts of the biological systems and human activities, as well as the processes entailed in decision making and policy development relative to environmental issues.

ECON157 Economics of Natural Resources and Environment  
 EN207 Climate Change, Energy, and Development  
 GEOG126 Living in the Material World  
 GEOG180 Earth Transformed  
 GEOG224 Economy and Environment  
 GEOG250 Technology and Environmental Assessment  
 GOVT157 Politics of Environmental Issues in the United States  
 GOVT276 Environmental Law  
 PHIL131 Environmental Ethics

**Other recommendations:** Students interested in Environmental and Conservation Biology, whose interests overlap with those of a biology faculty member, and who meet B.A./M.A. academic requirements, should seriously consider participating in the Accelerated B.A./M.A. Degree Program. This program enables students with career goals that include research to develop a much deeper understanding of the field, and of the skills involved in hypothesis development, data acquisition and analysis, and written and verbal presentation skills.

### **Earth Systems Science Track**

Earth Systems Science examines the structure and function of the parts of the earth—geosphere, hydrosphere and atmosphere—and how they interact to create the biosphere (zone of life). It is an integrated science that permits the earth system puzzle to be put together as whole, and is the foundation for a range of science and societal issues including global climate change, thinning of the ozone layer, land-scape dynamics, and loss of biotic diversity.

The earth systems science track in the environmental science major emphasizes the structure and function of the terrestrial surface of the earth, including human land use and consequences, and the use of remote sensing and geographical information sciences for problem solving. Students completing the this track are prepared for a large range of professional endeavors and advanced studies involving the geosciences, physical geography, and GIScience. The earth systems science track carries the following requirements:

### **Environmental Science Core Courses (3)**

These courses are intended to provide all students in the environmental science major with a common, general background and vocabulary in environmental science:

BIOL103 Principles of Environmental and Conservation Biology  
 EN101 Sustainability Science: Environment, Society and Technology  
 GEOG104 Earth System Science

### **Basic Skills (2; at least 1 at the 200 level)**

These courses develop skills in statistics, modeling and database management.

ECON160 Introduction to Statistical Analysis  
 GEOG110 Introduction to Quantitative Methods in Geography  
 GEOG247 Intermediate Quantitative Methods in Geography  
 GEOG260 Quantitative Modeling  
 GEOG285 Spatial Database Development  
 MATH120, 121 Calculus I and II  
 PSYC105 Quantitative Methods may be accepted at the discretion of the ESS track adviser

### **Elective Introductory Environmental Systems**

### **Science Courses (5; 3 at the 100 level)**

These courses include offerings in physical geography, hydrology, weather and climate, global warming, environmental chemistry and biodiversity.

BIOL114 Marine Biology  
 CHEM142 Environmental Chemistry  
 GEOG014 Weather, Climate and Landforms  
 GEOG022 Why Global Warming Matters (when offered as a lecture course and not a first-year seminar)  
 GEOG101 Introduction to Environmental Geology  
 GEOG102 Understanding the Weather  
 GEOG103 The Natural Environment of New England

GEOG114 Intermediate Geomorphology  
GEOG115 Introduction to Hydrology and Water Resources  
GEOG116 Forest Ecology

**Elective Advanced Environmental Systems Science Courses  
(3; 2 from Geography, 2 must be at the 100/200 level)**

These are more narrowly focused, upper division courses in Earth Systems Science.

BIOL201 Ecology of Atlantic Shores  
BIOL216 Ecology  
BIOL220 Population Biology  
BIOL224 Ecology of Disease Vectors  
BIOL 258 Conservation Biology  
GEOG232 Landscape Ecology  
GEOG234 The Geography of Fire  
GEOG263 The Climate System and Global Environmental Change  
GEOG271 Groundwater Hydrology and Management  
GEOG281 Tropical Ecology

**Human-Environment Courses (2)**

Human interaction with the global environment is addressed here, from economic, political, management, ethical, cultural and legal perspectives.

ECON157 The Economics of Natural Resources and the Environment  
EN207 Climate Change, Energy and Development  
EN261 Decision Methods for Environmental Management  
GEOG126 Living in the Material World: The Political Geography of Resource Development  
GEOG136 Gender and Environment  
GEOG179 Globalization, Environment and Justice  
GEOG180 The Earth Transformed by Human Action  
GEOG200 Land Degradation  
GEOG211 African Environments and Geographical Implications  
GEOG224 Economy and Environment  
GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards/Seminar, Lecture, Discussion  
GEOG228 Management of Arid Lands  
GEOG237 Feminism, Nature and Culture  
GEOG239 Country and Culture  
GEOG250 Technology and Environmental Assessment  
GEOG277 Gender, Environment and Development  
GEOG280 Urban Ecology: Cities as Ecosystems  
GEOG284 Environment and Development in the Middle East and North Africa  
GOVT276 Environmental Law  
MGMT252 Corporate Environmental Management  
PHIL131 Environmental Ethics

**Skills GIScience (1)**

These offerings allow students to develop the knowledge to use Global and Environmental imaging and information systems.

GEOG087 Introduction to Environmental Information Systems  
GEOG190 Raster GIS  
GEOG282 Advanced Remote Sensing  
GEOG293 Introduction to Remote Sensing

**Research Experience**

This can be fulfilled by an appropriate capstone course, an internship, the HERO program (see Clark Web pages), directed research (EN299), or an honors thesis (EN297). The work must be presented as a poster at Academic Spree Day.

**Environmental Science and Policy Track**

The Environmental Science and Policy undergraduate program prepares students to deal with the complexities of environmental issues in society. The program provides students with an in-depth understanding of how human activity and technology are impacting the natural environment and provides social science and policy perspective on how these impacts can be minimized. The strong emphasis on the natural sciences ensures students understand the technical as well as the social aspects of the world's most pressing environmental issues.

The environmental science and policy track carries the following requirements:

**Environmental Science Core Courses (3)**

These courses are intended to provide all students in the environmental science major with a common, general background and vocabulary in environmental science:

BIOL103 Principles of Environmental and Conservation Biology  
EN101 Sustainability Science: Environment, Society and Technology  
GEOG104 Earth Systems Science

**Statistics (1)**

These courses provide analytical and statistical expertise necessary for the discipline.

BIOL106 Quantitative Methods in Biology  
GEOG110 Introduction to Quantitative Methods

In some cases the ES&P track director may allow substitution with one of the following.

ECON160 Introduction to Statistical Analysis  
GOVT107 Research Methods

**Disciplinary Introductory Science Courses (3)**

These courses provide background in the sciences, including biology, chemistry and physics. Chosen from the following, the courses must draw on at least two different disciplines:

BIOL102 Introductory Biology II  
Either BIOL216 Ecology or BIOL105 Evolution  
CHEM101 Introductory Chemistry I  
CHEM102 Introductory Chemistry II  
CHEM103 Accelerated Introductory Chemistry  
PHYS110 Introductory Physics I  
PHYS111 Introductory Physics II

**Science Electives (3; at least one at the 200 level)**

These courses may be chosen from a wide range of advanced science electives in biology, chemistry, geography and physics. At least one must be at 200-level:

BIOL114 Marine Biology  
BIOL118 Genetics  
BIOL201 Ecology of Atlantic Shores  
BIOL216 Ecology  
BIOL217 Ecology of Infectious Diseases  
BIOL220 Population Biology  
BIOL258 Conservation Biology



BIOL302 Applied Ecology  
 CHEM142 Environmental Chemistry  
 EN203 Biogeochemical Cycles and Global Change  
 EN241 Environmental Toxicology  
 GEOG101 Introduction to Environmental Geology  
 GEOG102 Understanding the Weather  
 GEOG103 The Natural Environment of New England  
 GEOG114 Intermediate Geomorphology  
 GEOG115 Introduction to Hydrology and Water Resources: A Geographical View  
 GEOG190 Raster GIS  
 GEOG232 Landscape Ecology  
 GEOG260 Quantitative Modeling  
 GEOG263 The Climate System and Global Environmental Change  
 GEOG271 Groundwater Hydrology and Management  
 GEOG281 Tropical Ecology  
 GEOG282 Advanced Remote Sensing  
 Or other intermediate/advanced science courses approved by the ES&P track adviser.

### **Social Science (2)**

Chosen from a diversity of courses with emphasis on public policy approved by the ES&P track adviser.

ECON157 The Economics of Natural Resources and the Environment  
 ECON257 Environmental and Natural Resource Economics  
 EN124 Global Warming: How to Respond?  
 GEOG022 Why Global Warming Matters  
 GEOG025 Suburban Sprawl Under the Microscope  
 GEOG126 Living in the Material World: The Political Geography of Resource Development  
 GEOG127 Political Economy of Development  
 GEOG224 Economy and Environment  
 GOVT154 Politics of Public Policy in the United States  
 GOVT157 Politics of Environmental Issues in the United States  
 GOVT213 Policy Analysis  
 GOVT216 Comparative Environmental Politics  
 GOVT223 Suburban Policy Issues  
 GOVT281 Politics of Policy Implementation  
 SOC205 Sociology of Environment  
 Or other appropriate courses in social science with emphasis on public policy.

### **Environmental Science and Policy Courses (6)**

Two Required Courses:

EN120 Discovering Environmental Science  
 EN290 Capstone Research

### **Four Electives (2 must be at the 200 level):**

Chosen from advanced environmental science and policy courses.

ECON257 Environmental and Natural Resource Economics  
 EN103 The Sustainable University  
 EN207 Climate Change, Energy and Development  
 EN241 Environmental Toxicology  
 EN261 Decision Methods for Environmental Management and Policy  
 EN282 Management of Environmental Pollutants  
 GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards

GEOG247 Intermediate Quantitative Methods in Geography  
 GEOG250 Technology and Environmental Assessment  
 GEOG260 Quantitative Modeling  
 GEOG280 Urban Ecology: Cities as Ecosystems  
 GEOG284 Environment and Development in the Middle East and North Africa  
 GOVT276 Environmental Law  
 MGMT252 Corporate Environmental Management  
 PHIL131 Environmental Ethics

## **Honors Program**

**Who is eligible:** Students who, by the end of the sophomore year, have a minimum GPA of 3.5 in the major and 3.25 overall, and who have a demonstrated research background to undertake the independent honors research, are eligible to apply for the honors program.

**What the Honors Thesis entails:** Honors students must successfully complete a two-semester independent research project conducted under the supervision of a faculty adviser and one additional faculty member (either from the same or different department) who together constitute the student's Honors Committee. The project should make an original contribution to a body of knowledge. The product of the research will be a written thesis, the size and format of which to be decided jointly by the student and his/her faculty adviser. In addition to writing a thesis, the student will prepare and present a poster at Academic Spree Day in the spring of their senior year.

### **How to apply:**

- In the spring of the junior year the student presents a short letter of intent, approximately one page in length, to the Director of the ES Major. The letter should state the student's intention to pursue the honors thesis; report the overall and major-specific GPA; specify the research topic; and name the members of the Honors Committee. Additionally, the letter should briefly describe the research question or hypothesis, and the general methodological approach to the research (for example: laboratory measurement, field measurements, survey, computer modeling, analysis of case studies, policy analysis, technology assessment, economic analysis, and so on).
- In addition to the letter of intent, the principal faculty adviser should write a support letter to Director of ES. The adviser should state his/her opinion on the student's readiness to conduct the proposed research, approve the project as conceived, and express willingness to supervise the work.

### **Admission to honors research:**

- Deadline for the applications is **April 1**.
- The Faculty Steering Committee for the Environmental Science Major will review student applications and faculty support letters, and will notify the applicants of their admission to the honors program by **May 1**.

**How to graduate with honors:** In order to graduate with honors the student must successfully conclude her/his research and have his/her thesis accepted by the Honors Committee. Deadline for submitting completed Thesis is **Wednesday of the first week in April**. The student must additionally present the research results at Academic Spree Day. He/she must also maintain a GPA of 3.25 overall and 3.5 in the major until the end of their senior year.

## Environmental Science Minor

The requirements for a minor in environmental science include a total of six courses. Of these, three are required and three are selected from clusters of approved courses. These six courses introduce students to the program's three tracks: Earth Systems Science (ESS), Environmental and Conservation Biology (ECB), and Environmental Science and Policy (ES&P).

The following three courses are required:

BIOL103 Principles of Environmental and Conservation Biology

EN101 Sustainability Science: Environment, Society, and

Technology

GEOG104 Earth Systems Science

In addition, students must take three additional courses, one from each of the three tracks:

*One additional Earth Systems Science (ESS) course* is required. The ESS course must be selected from the categories of introductory or advanced ESS courses (not skills or Human-Environment courses) as listed on the ESS track course requirements page.

*One additional Environmental and Conservation Biology (ECB) course* from among the following three courses:

BIOL105 Evolution

BIOL118 Genetics

BIOL216 Ecology

*One additional Environmental Science and Policy (ES&P) course* from the following list of courses taught by one of the core ES&P faculty:

EN120 Discovering Environmental Science

EN207 Climate Change, Energy and Development

EN241 Environmental Toxicology

EN261 Decision Methods for Environmental Management and Policy

EN277 Sustainable Consumption and Production

EN282 Management of Environmental Pollutants

## Accelerated Degree Program

Environmental Science offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

## Courses

**BCMB271 BIOCHEMISTRY I/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 271.

**BIOL102 INTRODUCTION TO BIOLOGY II/LECTURE, LABORATORY**

See Biology 102.

**BIOL103 PRINCIPLES OF ENVIRONMENTAL AND CONSERVATION BIOLOGY/LECTURE, LABORATORY**

See Biology 103.

**BIOL105 EVOLUTION/LECTURE, LABORATORY, DISCUSSION**

See Biology 105.

**BIOL106 QUANTITATIVE METHODS IN BIOLOGY/LECTURE, LABORATORY**

See Biology 106.

**BIOL110 INTRODUCTION TO BOTANICAL DIVERSITY/ LECTURE, LABORATORY**

See Biology 110.

**BIOL114 MARINE BIOLOGY/LECTURE, FIELD TRIPS**

See Biology 114.

**BIOL118 GENETICS/LECTURE, LABORATORY**

See Biology 118.

**BIOL180 INTRODUCTION TO FUNGAL BIOLOGY/LECTURE, LABORATORY**

See Biology 180.

**BIOL201 ECOLOGY OF ATLANTIC SHORES/LECTURE, FIELD TRIP**

See Biology 201.

**BIOL216 ECOLOGY/LECTURE, LABORATORY**

See Biology 216.

**BIOL217 ECOLOGY OF INFECTIOUS DISEASE/SEMINAR**

See Biology 217.

**BIOL219 PHYSIOLOGICAL ECOLOGY OF MARINE ALGAE/LECTURE, LABORATORY**

See Biology 219.

**BIOL220 POPULATION BIOLOGY/LECTURE**

See Biology 220.

**BIOL223 TOPICS IN MARINE BIOLOGY/LECTURE, SEMINAR**

See Biology 223.

**BIOL224 ECOLOGY OF DISEASE VECTORS/LECTURE, LABORATORY**

See Biology 224.

**BIOL242 ANIMAL BEHAVIOR/LECTURE, LABORATORY**

See Biology 242.

**BIOL243 SEMINAR IN EVOLUTION/SEMINAR**

See Biology 243.

**BIOL244 BIOLOGICAL CLOCKS/DISCUSSION, LECTURE**

See Biology 244.

**BIOL254 MOLECULAR SYSTEMATICS AND EVOLUTION/LECTURE, LABORATORY**

See Biology 254.

**BIOL256 BIOLOGY OF SYMBIOSIS/LECTURE, LABORATORY**

See Biology 256.

**BIOL258 CONSERVATION BIOLOGY**

See Biology 207.

**BIOL302 APPLIED ECOLOGY**

See Biology 302.

**CHEM101 INTRODUCTORY CHEMISTRY I/LECTURE, LABORATORY**

See Chemistry 101.

**CHEM103 ACCELERATED INTRODUCTORY CHEMISTRY/LECTURE, LABORATORY**

See Chemistry 103.

**CHEM131 ORGANIC CHEMISTRY I/LECTURE, LABORATORY**

See Chemistry 131.

**CHEM142 ENVIRONMENTAL CHEMISTRY/LECTURE, LABORATORY**

See Chemistry 142.

**ECON157 THE ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT/LECTURE**

See Economics 157.

**ECON160 INTRODUCTION TO STATISTICAL ANALYSIS/LECTURE, DISCUSSION**

See Economics 160.

**EN025 SUBURBAN SPRAWL UNDER THE MICROSCOPE/LECTURE, DISCUSSION, FIRST YEAR SEMINAR**

See Geography 125.



**EN101 SUSTAINABILITY SCIENCE: ENVIRONMENT, SOCIETY AND TECHNOLOGY**

Sustainability science, an emerging field focused on the dynamic interactions between nature and society, is defined by the urgent problems it addresses rather than the disciplines it employs. Urgency for the societal need to promote a sustainability transition is increasing as risks associated with climate change, biodiversity loss, deforestation, and other types of environmental degradation are increasingly threatening human well-being and disrupting the earth's systems. Despite this urgency, the complexity and varying scales of the interconnected human-environment systems are preventing society from implementing social change to effectively confront these problems and transition toward sustainability. This transdisciplinary science course examines this complexity by focusing on scientific and societal linkages among environmental science, technological development, and attempts to reduce environmental impacts. Among the interconnected problems to be examined are: (1) climate change, energy, and atmospheric carbon dioxide concentrations, (2) agriculture, food production, land-use decisions, and human alteration of the nitrogen cycle, (3) ozone depletion, international environmental policy, and the phase out of chlorofluorocarbons, and (4) growing disruptions in the hydrologic cycle resulting in increasingly daunting challenges of water resource management. This course includes a required weekly laboratory and fulfills the natural science perspective requirement. Ms. Stephens/Offered every year, spring semester

**EN103 THE SUSTAINABLE UNIVERSITY**

Urgency for the societal need to promote a sustainability transition is increasing as risks associated with climate change, biodiversity loss, deforestation, and other types of environmental degradation are increasingly threatening human well-being in complex ways. This course explores both the theory and practice of sustainability and sustainable development by examining the role of the university in promoting a sustainability transition. The role of universities in society involves more than providing formal course instruction for enrolled students; universities are also critical places of discovery and innovation, centers for political discourse, and catalysts for political action. This course focuses on sustainability at the university because institutions of higher education have unique potential to catalyze and/or accelerate a sustainability transition. In addition, the focus on the university provides a lens for examining how institutions with complex structures make a myriad of decisions with environmental consequences, a context for considering the broad role of education in sustainable development, and a framework and perspective with direct and personal connections for students to consider the challenges of promoting sustainability. In addition to reading and writing about the challenges of sustainability and the role of the university in promoting sustainable practices in society, students engage directly with the challenges associated with promoting sustainable behavior and fostering institutional and social change through group projects right here on the Clark campus. Ms. Stephens/Offered every year, fall semester

**EN120 DISCOVERING ENVIRONMENTAL SCIENCE/ LECTURE, DISCUSSION**

Covers key scientific and technical topics and emphasizes quantitative skills of problem solving. Topic areas include: mass and energy transfer; environmental chemistry: mathematics of growth; risk assessment; water pollution; and air pollution. The course aims to provide a solid foundation in important scientific aspects of environmental problems, complementing policy-oriented courses. Above all the course is designed to make students literate and comfortable with the language

used to describe and analyze physicochemical processes. Study journals and homework problems are used to encourage literacy. Math skills emphasized. Mr. Downs/Offered every year

**EN123 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 131.

**EN180 THE EARTH TRANSFORMED BY HUMAN ACTION/LECTURE, DISCUSSION**

See Geography 180.

**EN226 WHO FEARS WHAT AND WHY: SOCIAL THEORIES OF ENVIRONMENTAL RISKS AND HAZARDS/SEMINAR, LECTURE, DISCUSSION**

See Geography 226.

**EN241 ENVIRONMENTAL TOXICOLOGY/LECTURE**

Focuses on the assessment of hazardous properties of toxic chemicals in the environment and on development of public-health policy. Covers the principles of absorption, distribution, excretion, and toxic action of chemicals on humans; animal testing; and human epidemiology. Also covers assessment of public-health risks on the basis of animal and human test results, development of standards for air and water contaminants, and uncertainty in regulating hazardous chemicals. Prerequisite: one semester of organic chemistry or permission of the instructor. Ms. Brown/Offered every other year

**EN242 SUSTAINABLE DEVELOPMENT ASSESSMENT AND PLANNING**

See Community Planning and Development 332.

**EN252 GREEN BUSINESS MANAGEMENT**

See Management 252.

**EN257 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS/LECTURE, DISCUSSION**

See Economics 257.

**EN266 ENERGY & CLIMATE SOCIAL CHANGE RESEARCH SEMINAR**

This research seminar is designed to support independent student research examining challenges, opportunities and approaches for facilitating a social and technological transition toward climate change mitigation. The course content will vary with the interests of the participants, but the course is designed for students interested in developing their own research projects on either social or technical dimensions of energy generation and use, including: renewable energy technology, electricity production and distribution, energy efficiency and conservation, new consumption patterns, new policy alternatives and technological innovation. The course will encourage students to focus on the most recent literature; current technological advances; grass roots and policy initiatives; case studies and small scale experiments with new technologies, products and services; social movements; and new and emerging policies and institutions on the scales ranging from local to regional, national and international. Cross-listed as IDCE30226 Ms. Stephens or Ms. Brown/Offered every year, spring semester/Advanced undergraduates only; instructor permission required for registration

**EN276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION**

See Government and International Relations 276.

**EN277 SUSTAINABLE CONSUMPTION AND PRODUCTION**

The increasingly unsustainable pressure on the Earth's natural systems calls for radical changes in the way people in the industrialized and in the rapidly growing economies satisfy their appetite for goods and services. Some believe that innovation in technologies is our great hope, while others emphasize the need to change the consumption patterns of individuals and societies. Both necessitate changes in institutions, values, and social arrangements. This advanced seminar examines the

role that changes in technology, institutions and culture might play in bringing about the necessary change toward more environmentally sustainable development. Four types of innovation are discussed: in the production process, in product design, in function delivery by way of products and services, and in a larger sociotechnical system. The course draws on theories of technological innovation, consumer behavior and institutionalism as well as empirical case studies from the United States, Europe and some developing countries. The course considers the key drivers of change, such as government policy, market forces, cultural norms, activities of mission-oriented organizations, social movements and others. Ms. Brown/Advanced undergraduates only; instructor permission required for registration

**EN282 MANAGEMENT OF ENVIRONMENTAL POLLUTANTS/SEMINAR**

Studies approaches to regulating hazardous chemicals in air, water and food. The course is built around the three general types of interventions that have been practiced by regulatory agencies over the last three decades: shifting to safer technologies; issuing licenses to pollute in the form of industrial emission permits; and setting standards for air, water and food contaminants. The scientific controversies in setting standards and issuing permits are presented vis-à-vis the legislative mandates, the need for benefit-cost accounting and the scientific uncertainty. The strengths and weaknesses of command-and-control system versus the incentive-based system with regard to industrial enterprises are also discussed. Emphasizes recent efforts to decrease government involvement in corporate environmental management and to shift towards an incentive-based regulatory system. While focus is on public policies in the United States, international comparisons with Western European and Eastern European countries are included. The course has a seminar format, with weekly student presentations and class discussions. By instructor permission for undergraduate students. Required for environmental science and policy master's degree students. Ms. Brown/Offered every year

**EN287 INTERNATIONAL ENVIRONMENTAL LAW AND POLICY**

Global environmental issues are at the forefront of the policy agenda, both domestically and in the international arena. These new challenges can be distinguished from earlier environmental problems by their global scope, long-term inter-generational consequences, and the magnitude of the changes – political, economic, behavioral and technological – they will inevitably require. This course engages students in comparative analysis of how different parts of the world, different countries and different communities are responding to these challenges. It discusses alternative forms of global and regional policies and models of governance that are sensitive to the interests and perspectives of individual nation-states. Fulfills the requirement for Global Comparative Perspective. Cross-listed with GOVT 288/Offered annually/Advanced undergraduates only; instructor permission required for registration

**EN290 CAPSTONE RESEARCH/SEMINAR**

A required course for senior environmental science and policy majors, this seminar offers an opportunity to integrate the strands of the environmental science and policy major. The product will be a completed research project and a poster presentation. A research proposal for an honors project or a master's thesis is optional but strongly encouraged. Specific topics for investigation are chosen largely on the basis of student interest from a broad array including global environment threats, energy and other resource issues, community brown fields, and techno-

logical risk assessment and management. Unlike a regular course, student presentations constitute a major portion of class meetings, with the instructor as a facilitator of discussion and as a general resource for the group. Students must be seniors or second-semester juniors and must have completed a substantial fraction of their major requirements. Ms. Brown/Offered every fall

**EN297 HONORS RESEARCH/SEMINAR**

Honors in environmental science requires directed research for at least two semesters under the supervision of a faculty member of the program, a thesis, and an oral presentation. Prerequisite: permission of the ES Director. Staff/Offered every semester.

**EN299 DIRECTED STUDY**

Individual investigations involving research or advanced directed readings in the literature under the direction of a faculty member of the program. Prerequisite: permission of the instructor. Staff/Offered every semester

**GEOG022 WHY GLOBAL WARMING MATTERS/LECTURE, DISCUSSION, FIRST YEAR SEMINAR**

See Geography 022.

**GEOG087 INTRODUCTION TO ENVIRONMENTAL INFORMATION SYSTEMS/LECTURE, LABORATORY**

See Geography 087.

**GEOG101 INTRODUCTION TO ENVIRONMENTAL GEOLOGY/LECTURE, LABORATORY**

See Geography 101.

**GEOG102 WEATHER AND CLIMATE/LECTURE, LABORATORY**

See Geography 102.

**GEOG103 THE NATURAL ENVIRONMENT OF NEW ENGLAND/FIELD COURSE**

See Geography 103.

**GEOG104 EARTH SYSTEMS SCIENCE/LECTURE, LABORATORY**

See Geography 104.

**GEOG110 INTRODUCTION TO QUANTITATIVE METHODS /LECTURE, LABORATORY**

See International Development and Social Change 110.

**GEOG115 INTRODUCTION TO HYDROLOGY/LECTURE, DISCUSSION**

See Geography 115.

**GEOG116 FOREST ECOLOGY/LECTURE, DISCUSSION**

See Geography 116.

**GEOG119 ARCTIC SYSTEM SCIENCE / LECTURE, DISCUSSION**

See Geography 119.

**GEOG126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION**

See Geography 126.

**GEOG127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE**

See Geography 127.

**GEOG136 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION**

See Geography 136.

**GEOG179 GLOBAL ENVIRONMENTAL JUSTICE/ LECTURE, DISCUSSION, FIRST-YEAR SEMINAR (IN ALTERNATE YEARS)**

See Geography 179.

**GEOG184 NOMADS TO OIL SHEIKHS: THE NEW GEOGRAPHY OF THE MIDDLE EAST/LECTURE, SEMINAR**

See Geography 184.



**GEOG224 ECONOMY AND ENVIRONMENT/ LECTURE, DISCUSSION**

See Geography 224.

**GEOG232 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION**

See Geography 232.

**GEOG234 THE GEOGRAPHY OF FIRE/LECTURE, DISCUSSION**

See Geography 234.

**GEOG237 FEMINISM, NATURE AND CULTURE/ SEMINAR**

See Geography 237.

**GEOG247 INTERMEDIATE QUANTITATIVE METHODS IN GEOGRAPHY/LECTURE, LABORATORY**

See Geography 247.

**GEOG250 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT/SEMINAR**

See Geography 250.

**GEOG263 THE CLIMATE SYSTEM AND GLOBAL ENVIRONMENTAL CHANGE/ LECTURE, DISCUSSION**

See Geography 263.

**GEOG271 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION**

See Geography 271.

**GEOG277 GENDER, ENVIRONMENT AND DEVELOPMENT/SEMINAR**

See Geography 277.

**GEOG280 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION**

See Geography 280.

**GEOG281 TROPICAL ECOLOGY/LECTURE, DISCUSSION**

See Geography 281.

**GEOG282 ADVANCED REMOTE SENSING/LECTURE, LABORATORY**

See Geography 282.

**GEOG285 SPATIAL DATABASE DEVELOPMENT**

See International Development and Social Change 276.

**GEOG293 INTRODUCTION TO REMOTE SENSING /LECTURE, LABORATORY**

See International Development and Social Change 271.

**GOVT154 THE POLITICS OF PUBLIC POLICY IN THE UNITED STATES/LECTURE, DISCUSSION**

See Government and International Relations 154.

**GOVT157 THE POLITICS OF U.S. ENVIRONMENTAL ISSUES/LECTURE, DISCUSSION**

See Government and International Relations 157.

**GOVT213 POLICY ANALYSIS/LECTURE, DISCUSSION**

See Government and International Relations 213.

**GOVT216 COMPARATIVE ENVIRONMENTAL POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 216.

**GOVT223 SUBURBAN POLICY ISSUES/SEMINAR**

See Government and International Relations 223.

**GOVT281 THE POLITICS OF POLICY IMPLEMENTATION/SEMINAR**

See Government and International Relations 281.

**ID190 RASTER GIS/LECTURE, LABORATORY**

See International Development and Social Change 190.

**ID260 QUANTITATIVE MODELING/LECTURE DISCUSSION**

See International Development and Social Change 260.

**IDCE30205 CLIMATE CHANGE, ENERGY AND DEVELOPMENT**

See Environmental Science 207.

**IDCE363 DECISION METHODS FOR ENVIRONMENTAL MANAGEMENT AND POLICY/LECTURE, DISCUSSION**

See Environmental Science 261.

**IDCE392 GIS & LAND CHANGE SCIENCE**

See Environmental Science 235.

**MATH120 CALCULUS I/LECTURE**

See Mathematics 120.

**MATH121 CALCULUS II/LECTURE**

See Mathematics 121.

**PHIL232 CASE STUDIES IN ENVIRONMENTAL ETHICS/SEMINAR**

See Philosophy 232.

**PHYS110 INTRODUCTORY PHYSICS – PART I/LECTURE, DISCUSSION, LABORATORY**

See Physics 110.

**PHYS111 INTRODUCTORY PHYSICS – PART II/LECTURE, DISCUSSION, LABORATORY**

See Physics 111.

**PSYC105 QUANTITATIVE METHODS/LECTURE, DISCUSSION**

See Psychology 105.

**SOC205 SOCIOLOGY OF THE ENVIRONMENT/LECTURE, DISCUSSION**

See Sociology 205.

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**FOREIGN LANGUAGES AND LITERATURES**

**Program Faculty**

Everett Fox, Ph.D. - *Chair*

María Acosta Cruz, Ph.D.

Belén Atienza, Ph.D.

Paul Burke, Ph.D.

Carol D'Lugo, Ph.D.

Marvin D'Lugo, Ph.D.

William Ferguson, Ph.D.

Odile Ferly, Ph.D.

Beth Gale, Ph.D.

Constance Montross, Ph.D.

Michael Spingler, Ph.D.

Catherine Quick Spingler, M.A.

Robert Tobin, Ph.D.

Alice Valentine, M.A.

**Adjunct Faculty**

Marcia Butzel, Ph.D.

Gary Overvold, Ph.D.

**Emeriti Faculty**

Raymond E. Barbera, Ph.D.

Kenneth Hughes, Ph.D.

Hartmut Kaiser, Ph.D.

Dorothy Kaufmann, Ph.D.

Walter Schatzberg, Ph.D.

**Program Overview**

The Foreign Languages and Literatures Department is part of the Alice Coonley Higgins School of Humanities. The program investigates how peoples and nations express themselves through language, literature and other cultural phenomena. The interdisciplinary spirit of the program illuminates the relationship between national literatures and other areas of the humanities and social sciences.

The major is offered in French and Spanish. It is also possible, at the department's discretion, to major in more than one language (the combined foreign languages major).

There are majors available in comparative literature and ancient civilization as well. Though based in foreign languages and literatures, these two programs—together with the minor offered by ancient civilization—are described elsewhere in the catalog under their own headings.

## Undergraduate Requirements

1. Eight courses above the intermediate level. In French, major credit is given for courses above FREN106; in German, above GERM102; in Spanish, above SPAN127.

The eight required courses include:

- An introductory-level course in literature
- A course in culture criticism
- For Spanish majors, an advanced grammar and composition course (SPAN237 or the equivalent); for French majors, FREN137
- The Advanced Topics course (297)
- At least two courses taken in a Clark-sponsored or Clark-approved study-abroad program (This requirement may be waived in special circumstances.)

At least four of the eight required courses must be taken in residence at the Worcester campus.

2. Five related courses, at least one of which must be CMLT130 The National Imagination. These five related courses are to be selected with the major adviser. They might be courses in other languages and literatures, or in subjects further afield that enrich the student's understanding of core material. When the major program is concentrated in one language, a reading knowledge of a second language is strongly recommended. Only course grades of C or better may be counted toward the major.

## Requirements for the Combined Foreign Languages Major

- Five courses in each of two languages, chosen from the list of courses that would count toward a single-language major (GERM103 and above; FREN120 and above; SPAN131 and above)
- The Advanced Topics course (capstone course, numbered 297) in at least one of the two language areas chosen
- One course in Comparative Literature, normally the core course (CMLT130) required of all our majors
- Four related courses, as determined in consultation with the student's major adviser
- At least two units of study abroad in a culture in which one of the target languages is spoken. Ordinarily, courses taken abroad may be counted toward the five required courses in each language area.

## Honors Program

This honors program is for foreign languages and literatures majors only. By Nov. 1 of the capstone semester, faculty will identify qualified senior majors (with a minimum GPA of 3.5) and invite them to work on a semester-long honors thesis during the spring of their senior year. Other students who wish to take honors should identify an area of interest during the capstone semester, consult with the capstone professor and/or an appropriate honors adviser, and submit a proposal (by Dec. 1) to the professor they would like to direct the project.

- Proposals will be approved at the discretion of the individual professor.
- The department chair must also approve the project.
- The honors candidate and adviser will decide on a work schedule, but a preliminary draft must be completed by the first week of April.
- The final version is due one week before the last day of classes.
- A second faculty reader will participate in the final evaluation of the honors project.
- An honors project counts as one unit of credit.

## Foreign Languages and Literatures Minor

A minor program in foreign languages and literatures is offered in French, German and Spanish.

To qualify, a student must complete six courses in the chosen discipline at a level of difficulty that would count toward a major in that field. Some courses may be replaced by courses outside the field of study but related to it (a course in Latin-American history, for example, might be counted as a related course toward a minor in Spanish). Advanced Topics courses required of majors (FREN297, GERM297 and SPAN297) are not required for the minor, but they may be taken for minor credit with permission of the instructor. Courses taken in study-abroad programs may be counted toward the minor, at the department's discretion. Students must declare their intention of fulfilling a minor by the end of the junior year. Only course grades of C or better may be counted toward the minor.

## Courses

### CHIN101 ELEMENTARY CHINESE/ LECTURE, DISCUSSION

Introduces the Chinese language (standard Mandarin) for students with no background in Chinese. Focus is on all four language skills—speaking, listening, reading and writing—including the writing of Chinese characters. No credit is given for CHIN101 without successful completion of CHIN102. Staff/Offered every year

### CHIN103 INTERMEDIATE CHINESE/LECTURE, DISCUSSION

Covers the basic grammatical structures employed in modern vernacular Chinese and sufficient vocabulary and cultural background to engage comfortably in the most common types of social interaction in today's China and Taiwan. By the end of CHIN104, students will possess the necessary tools to read essays and articles on current social issues, view programs and films in Mandarin, and discuss the content, in both written and oral form. Prerequisite: CHIN102 or permission. Completion of CHIN103 is a prerequisite for participation in Clark's study-abroad program in Beijing. Bei Zhang/Offered every year

### CHIN105 ADVANCED CHINESE

Course consolidates basic language skills after completion of CHIN104. Emphasis is on communicative proficiency in the development of oral and written skills, self expression and cultural insight. Prerequisite: CHIN104 or equivalent. Staff/Offered every other semester

### CMLT130 THE NATIONAL IMAGINATION

This course explores the concept of a national community as constructed and critiqued through literary and cinematic narratives, as well as other cultural texts. Special emphasis is given to the ways in which national languages have been used to promote the sense of cultural continuity and identity for various national communities.



Variable content. This is a team-taught course with national focus changing depending upon the participation of particular members of the foreign languages faculty. Staff/Offered every spring

#### **CMLT134 LATINO LITERATURE AND MEDIA ARTS**

The course explores the variety of expressions of Latino identity as a hybrid formation within U.S. culture. Unlike traditional Spanish-language literature which is historically formed and rooted within a Hispanic national community, Latino culture generally functions between and around different cultures. It is a culture of migration, assimilation, resistance to the melting pot, as well as a unique expression of a new ethnicity in formation. Features Puerto Rican, Cuban-American, Mexican-American, Dominican-American and other cultural products. Not offered to first-year students. Conducted in English. Prerequisite: Minimum one college-level course above 101/102 in Spanish language. Available for Spanish major credit. Ms. Acosta Cruz, Mr. D'Lugo/Offered periodically

#### **CMLT174 ISLANDS IN THE STREAM: PUERTO RICO AND THE FRENCH ANTILLES**

An examination of Hispanic and French cultures in the Caribbean, with a specific focus on Puerto Rico and the French Antilles. The course begins with an analysis of theoretical issues of colonialism, post-colonialism, and neocolonialism in the region, and follows with an exploration of specific issues such as assimilation, acculturation and alienation. The course then examines the notions of race, gender, language and nationhood through cultural production within and outside of the islands. Ms. Acosta Cruz and Ms. Ferly/Offered periodically.

#### **FREN101 ELEMENTARY FRENCH/LECTURE, DISCUSSION**

For students with no background in French or no more than one year of high-school French. Students work on all four language skills—listening, speaking, reading, and writing—to develop an active knowledge of French. Students participate in weekly conversation groups with a French teaching assistant and work individually in the language lab. No credit is given for FREN101 without successful completion of FREN102. Ms. Spingler/Offered every year

#### **FREN105 INTERMEDIATE FRENCH I/LECTURE, DISCUSSION**

Consolidates basic skills for students who have completed FREN102 or the equivalent. Emphasizes communicative proficiency: the development of oral and written skills, self-expression and cultural insight. There are weekly conversation groups with a French teaching assistant. Prerequisite: FREN102, 103 or equivalent, or permission. Staff/Offered every semester

#### **FREN106 INTERMEDIATE FRENCH II/LECTURE, DISCUSSION**

Bridges basic skills courses and advanced courses in language, literature and culture. Emphasizes literary and cultural texts. Develops ability to articulate ideas and to participate in meaningful discussions in French. Grammar review is based on specific needs of the group as revealed by class work and compositions. There are weekly conversation groups with a native French speaker. Prerequisite: FREN105 or equivalent determined by placement exam. Staff/Offered every semester

#### **FREN108 PARIS AND 20TH CENTURY ARTISTIC MOVEMENTS: ART, THEATER AND CINEMA**

This seminar traces from 1897-1970 the artistic movements in 20th century Paris that sought divergent artistic paths from the dominant realistic-naturalistic style of the period. We will concentrate on two major themes: (1) the way painters, playwrights and filmmakers sought to reinvent artistic form in order to challenge conventional modes of representing the world, (2) how Paris as a distinct and unique place

provided the setting for the flourishing of unconventional artistic creation and life. We will study three movements and urban places: (1) the early 20th century avant-garde (Montmartre); (2) Surrealism (Montparnasse); and, (3) Existentialism (Saint-Germain-des-Pres). During our study we will consider questions of aesthetics and their relationship to social and political ideologies. Artists studied include Pablo Picasso, Alfred Jarry, Guillaume Apollinaire, Luis Bunuel, Jean Cocteau, Albert Camus and Jean-Paul Sartre. Mr. Spingler/Offered periodically

#### **FREN112 FAIRY TALES OF THE WORLD/LECTURE, DISCUSSION/FIRST-YEAR SEMINAR**

Fairy tales are among the oldest and simplest forms of literature. They communicate archetypal patterns of human experiences and societal behavior; they reflect human wisdom of all ages derived from all cultures, and their moral teaching is universal and universally applicable. This course will apply a variety of critical analysis methods to a selection of fairy tales from different countries, with an emphasis on the Brothers Grimm and Perrault. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to select this seminar. Ms. Gale/Offered periodically

#### **FREN120 WAYS OF WRITING, WAYS OF SPEAKING**

The introduction to advanced levels of French Studies, designed for majors, minors and those interested pursuing further work in French, this course introduces students to some of the areas of study they will find in the French program. It comprises three sections: 1) popular culture, poetry and song, in which we study the poems of Jacques Prévert and Gérard Camoin — contemporary “poète libertaire de Montmartre”, and the songs of the French music hall tradition (Piaf, Fréhel, Léo Ferré); 2) the francophone short story; and 3) a sampling of “para-littérature” including the Graphic Novel (bande dessinée), Theater and Film. The course seeks to develop the student's writing and speaking skills. Requirements include 8 one-page reaction papers, 3 short papers (the first two, 2-3 pages, the last, 3-5 pages), and 3 oral presentations. Given in French. Prerequisite: French 106 or equivalent Mr. Spingler/Offered every year

#### **FREN124 POPULAR CULTURE IN FRANCE**

An exploration of the multiple manifestations and transformation of French popular culture, from the 1940s to today, as disseminated in film, magazines, comics and music. Examines aspects of French culture such as youth culture, slang, sports, food and humor, and the way in which various media commonly portray topics such as family, love, foreigners and other social issues. Conducted in French. Ms. Ferly/Offered every year (also offered as COMMUNICATIONS124)

#### **FREN127 MEDIA WORKSHOP IN FRENCH**

Intensive practice in spoken and written French through the study of print and visual news media. Based on their own exploration of current news in Francophone newspapers and television, students will produce model news stories, radio or television broadcasts. In-class activity involves the preparation, rehearsal and delivery of radio or television news items, and informal conversational “editorial board” meetings where students discuss the merits and interest of particular stories offered by their classmates and decide which items should be developed for inclusion in a particular newspaper issue or broadcast. Students will be expected to research current news in such papers as *Le Monde* and *Liberation* (available on the Web) and such newscasts as “*le Journal de France 2*” (available at Clark through SCOLA). Given in French. Mr. Spingler/Offered periodically



**FREN131 READINGS IN FRENCH LITERATURE/LECTURE, DISCUSSION**

Introduces analysis and understanding of French literary texts and their visions of the world and of the self. Focuses on literary structures and conventions that form the basis of different genres through history. Readings include a wide range of complete texts in fiction, theater and poetry. Prerequisite: FREN120 or permission. Staff/Offered every year

**FREN136 STUDIES IN THE EVOLUTION OF FRENCH CULTURE/LECTURE, DISCUSSION**

Traditional French values, myths and social institutions in their relationship to changing cultural and social realities. We study Louis XIV's Gardens of Versailles and Napoleon III's redesigning of Paris as cultural texts that represent dominant political and social ideologies. Prerequisite: FREN120 or permission. Mr. Spingler/Offered periodically

**FREN137 STUDIES IN CONTEMPORARY FRENCH CULTURE**

Questions of cultural identity and cultural differences, with particular attention to France and foreigners, Franco-American (dis)connections and issues of immigration. Prerequisite: FREN120 or permission. Staff/Offered every year

**FREN140 FRANCOPHONE LITERATURE AND FILM**

An interdisciplinary analysis of the Francophone world through literature, social writing and film. Begins with an overview of French-speaking countries and regions in Asia, sub-Saharan Africa, Maghreb, Canada and the Caribbean. The focus continues on West Africa, the Caribbean and Maghreb. Conducted in French. Ms. Ferly/Offered every year

**FREN145 TRANSLATION WORKSHOP/LECTURE, DISCUSSION**

Students work on various texts (advertising, journalism, theater, film scripts and fiction) exploring theory, techniques and problems of translation. Emphasizes translation from French into English and stresses lexical and syntactic aspects of comparative style. Students become acquainted with the variety of texts an American professional translator might expect to work on, including film subtitling. Prerequisite: FREN120 or above or permission. Ms. Gale/Offered periodically

**FREN160 FRENCH CULTURE SEEN THROUGH FILM: JEAN RENOIR/LECTURE DISCUSSION**

Analyzes cinematic aesthetic and narrative strategies of the films of Jean Renoir, a leading figure in French cinema. Traces development of his art and focuses particularly on the way two works, "The Grand Illusion" and "The Rules of the Game," explore the historical problem of a continuing presence of prerevolution values and myths within 20th-century French republican culture. Taught in English and French sections. Prerequisite for students receiving French credit: one course above 130 or permission. Mr. Spingler/Offered periodically

**FREN165 THEATER WORKSHOP IN FRENCH/LECTURE, DISCUSSION**

A workshop course using scene study to provide direct experience of the theatrical synthesis within which play, actor and spectator operate. Emphasizes vocal delivery through intensive work on diction, phrasing, rhythm and gesture. Explores various approaches to the play's staging. Typically one playwright is studied and topics of theatrical practice are combined with theoretical issues concerning the social background and artistic conventions of the playwright's period. Playwrights studied may be: Molière, Marivaux, Ionesco, and Beckett. Conducted in French. Prerequisite: one French course above 130 or permission. Mr. Spingler/Offered periodically

**FREN168 IMMIGRATION IN FRANCE/LECTURE, DISCUSSION**

Through an examination of novels and film by various immigrant communities, notably the North Africans and the Africans, this course traces the history of immigration in France since the 1950s. A study of the media will detail the economic and social realities of these communities, examine their relationship with their host society, and assess their cultural, social economic and even political impact on contemporary France. Ms. Ferly/Offered every other year (Also offered as COMMUNICATIONS168)

**FREN170 THE COMIC SPIRIT IN FRENCH THEATER AND FILM/LECTURE, DISCUSSION**

Traces the evolution of comic expression and form from Molière through the 20th century. The course pays special attention to the particular artistic qualities of satire, parody and burlesque. We will also consider the ways in which the French comic tradition both influenced and was transformed by film. Authors studied may include Molière, Marivaux, Beaumarchais, Feydeau, and Anouilh. Mr. Spingler/Offered periodically

**FREN211 SPIRITED REBELLION: ADOLESCENCE FRENCH NOVEL AND FILM/LECTURE, DISCUSSION**

A close look at youth and the construction of adult identity in the French novel of the 19th and 20th centuries. Discussion of instruction vs. education, family structures, friendship, love relationships and sexuality, gender roles and society, and the transformation of narrative forms. Authors may include Balzac, Sand, Zola, Rachilde, Colette, Gide and Duras. Taught in French. Prerequisite: FREN131, 136 or above, or permission. Ms. Gale/Offered periodically

**FREN215 20TH CENTURY FRENCH AND FRANCOPHONE WOMEN WRITERS/LECTURE, DISCUSSION**

Explores the major works of French fiction and theory as they question and illuminate each other in the context of the contemporary French feminist controversy between theories and equality and theories of difference. Readings include Colette, Simone de Beauvoir, Helene Cixous, Marguerite Duras, Luce Irigaray, Monique Wittig, and Julia Kristeva. Prerequisite: permission of the instructor. Ms. Gale/Offered periodically

**FREN230 IMAGES OF YOUTH**

This is an interdisciplinary seminar examining the popular representation of "coming of age" through two media, literature and film, and across two cultures, France and the United States. We will examine youth as a social category, reading French and American literature and film against one another, exploring similarities and differences between the two genres in the creation of a cultural understanding of the place of youth in society. Given in English. Permission only. Ms. Gale/Offered periodically

**FREN240 PARIS IN ARTS AND LITERATURE/SEMINAR**

Investigates changing urban consciousness of 19th-century France by examining problems of representing the city through urban planning (architecture and urban landscape), and through visual representation of Paris by two painters, Caillebotte and Manet, and the literary representation of Paris by two poets, Baudelaire and Rimbaud. Given in French. Prerequisite: two French courses above 130 or permission. Mr. Spingler/Offered periodically

**FREN245 MYSTERIES OF THE CITY/LECTURE, DISCUSSION**

Study 19th-century France origins of the myth of the city as a place of mystery, enchantment and danger. Starting with Eugène Sue's "Mysteries of Paris," the course traces narrative and poetic representa-



tions of the city as instances of the melodramatic imagination. Explore the roots of the modern roman and film noir in such texts as Zola's "Thérèse Raquinè." Authors studied include Eugene Sue, Victor Hugo, Honoré de Balzac, Charles Baudelaire and Emile Zola and some 20th-century cinematic representations of 19th-century Paris. Conducted in French. This seminar may be taken by senior majors to fulfill their capstone requirement. Mr. Spingler/Offered periodically

**FREN256 NO MORE CLASSROOMS, NO MORE BOOKS: EDUCATION IN 20TH CENTURY FRENCH NOVEL AND FILM. LECTURE/DISCUSSION**

An exploration of literary and cinematic portrayals of youth with a focus on the role of the school and other sources of learning. Topics include gendered identity, social structures and narrative strategies. Authors may include Colette, Alain-Fournier, Gide, Sagan, Ernaux and Duras. Taught in French. Prerequisite: FREN131 and another course at the 130 level or above in French, or by permission. Ms. Gale/Offered periodically

**FREN263 STUDIES IN FRENCH CINEMA**

French cinema has been an especially successful European cinema for over a century. It has defined film as an art form and as a major site of national cultural production. Distinctive films can be found in every historical period, from the earliest "cinema of attractions" to today's auteur films and popular genre movies. Of the major world cinemas, French cinema has also been the most successfully nationalist: the French government has supported the industry, critics and policymakers have campaigned against Hollywood dominance, and filmmakers have been active in local and global politics. The focus of the course varies each time it is given. We may examine a particular filmmaker, movement, or arts tradition, a genre or comparison of genres, or a particular theme such as immigration, the representation of history, or sexual explicitness in recent films. Taught in English. Prerequisite: SCRN010 or permission. Ms. Butzel/Offered every other year

**FREN264 WRITING AND IDENTITY IN THE FRANCOPHONE CARIBBEAN**

An examination of the notion of identity in writing from Haiti and the French Caribbean (Guadeloupe, Martinique and French Guyana). The course looks at the society and economy of the Francophone Caribbean, their relationship with France both in cultural and political terms, the main socio-cultural challenges these Caribbean societies face today, as well as the literary canon of the region. Conducted in French. Ms. Ferly/Offered every other year

**FREN267 FRENCH CINEMA: THE NEW WAVE/ LECTURE, DISCUSSION**

Focuses primarily on the films of Jean-Luc Godard, which profoundly changed the look of contemporary cinema including American films. Also includes films by François Truffaut, Louis Malle, and Claude Chabrol, but primarily explores how Godard's radical transformations of film form reflected the crisis in cultural and political consciousness in France in the 1960s. Taught in English. Prerequisite for French credit: two courses above 130 or permission. Mr. Spingler/Offered periodically

**FREN270 THE MODERN FRENCH THEATER: EXPERIMENTS OF THE AVANT-GARDE/LECTURE, DISCUSSION**

Studies the origins and developments of the avant-garde theater of France with particular emphasis on the staging of the plays. Focuses on the theater since 1950, especially works by Ionesco, Beckett, Genet and Arrabal. Explores affinities between these playwrights and Dada and Surrealist movements and studies three precursors: Jarry, Ghelderode and Artaud. Conducted in French. Prerequisite: two courses above 130 or permission. Mr. Spingler/Offered periodically

**FREN297 ADVANCED TOPICS/SEMINAR**

A required capstone course for senior majors. Open to advanced students with permission of instructor. Modified versions of courses above the 200 level are offered periodically for 297 credit. Ms. Ferly, Ms. Gale, Mr. Spingler/Offered every year

**GERM101 INTRODUCTORY GERMAN/ LECTURE, DISCUSSION**

Imparts an active command of German. Combines grammar, oral practice and readings in literary and expository prose. There are weekly conversation groups with a native German speaker and individual laboratory work. No credit is given for GERM101 without successful completion of GERM102. Mr. Kaiser/Offered every year

**GERM103 INTERMEDIATE GERMAN I/LECTURE, DISCUSSION**

Consolidates basic skills for students who have completed GERM102 or the equivalent. Reviews grammar, reading and discussion of selections from newspapers and magazines. Develops skills in oral and written expression. There are weekly conversation groups with a native German speaker and individual laboratory work. Prerequisite: GERM102 or equivalent. Staff/Offered every year

**GERM104 INTERMEDIATE GERMAN II/ LECTURE, DISCUSSION**

Bridges basic skills courses and advanced courses in language, literature and culture. Reviews grammar and studies literary works on themes of contemporary German culture. Develops the ability to articulate ideas and to participate in discussions in German. There are weekly conversation groups with a native German speaker as well as individual laboratory work. Prerequisite: GERM103 or equivalent. Staff/Offered every year

**GERM131 GERMAN CULTURE AND CONVERSATION/LECTURE, DISCUSSION**

This third-year course strengthens speech habits, increases vocabulary and improves written expression. Literary and journalistic texts serve as a basis for discussion of contemporary issues. Weekly written assignments. Prerequisite: GERM104 or equivalent. Staff/Offered every year

**GERM150 THE NEW GERMAN CINEMA/LECTURE, DISCUSSION**

Studies films by German directors Fassbinder, Herzog, Kluge, Schlöndorff, Sanders-Brahms, Von Trotta and Wenders. Examines the cinematique technique and world view unique to each director. Also examines German-American cultural cross currents and social issues. Students study the films, read critical writings, write film critiques and produce a paper on the New German Cinema. No prerequisites. Staff/Offered periodically

**GERM297 ADVANCED TOPICS TUTORIAL IN GERMAN LITERATURE/LECTURE, DISCUSSION**

Determined by the needs and interests of individual students. Ordinarily taken by senior German majors as a capstone experience. Other advanced students of German language and literature may be invited to participate in the tutorials as space permits. Staff

**GRK101 INTRODUCTORY GREEK I, II/LECTURE, DISCUSSION**

Introduces the language of classical Greece. Covers the grammar and syntax of the Ancient Greek. Students read Ancient Greek texts including philosophical works such as Plato's "Apology of Socrates and Crito," and selections from Homer, Herodotus and the New Testament. No credit is given for GRK101 without successful completion of GRK102. Mr. Burke/Offered every other year

**GRK299 SUPERVISED READING IN PHILOSOPHICAL GREEK**

A study of selected philosophical texts in Greek. Mr. Pakaluk/Offered every semester

**HEBR101 ELEMENTARY HEBREW I/ LECTURE, DISCUSSION**

Modern conversational Hebrew. Emphasizes speaking, reading, writing and listening skills. Acquisition of vocabulary and basic grammar. Two class meetings per week, one hour of mandatory drill sessions led by a teaching assistant and individual work in the language laboratory. No credit is given for HEBR101 until successful completion of HEBR102. Staff/Offered every year

**HEBR102 ELEMENTARY HEBREW II/LECTURE**

This course is a continuation of HEBR101. Offered also for students who placed at that level during placements exams.

**HEBR103 INTERMEDIATE HEBREW/LECTURE, DISCUSSION**

Modern conversational Hebrew. Emphasis on speaking, reading, writing and listening skills. Enrichment and reinforcement of verbal expressions and grammatical structures. Two class meetings per week, one hour of mandatory drill sessions led by a teaching assistant and individual work in the language laboratory. HEBR102 or the equivalent required. Staff/Offered every year

**HEBR104 INTERMEDIATE-ADVANCED HEBREW/LECTURE, DISCUSSION**

Surveys significant Hebrew texts, including literature and newspapers, focusing on the Holocaust through literature. Enrichment of verbal and written expression and grammatical structures. Two class meetings per week, one hour of drill sessions, and individual work in the language laboratory. HEBR103 or equivalent required. Staff/Offered every year

**JAPN101 ELEMENTARY JAPANESE/LECTURE, DISCUSSION**

Introduces the Japanese language, emphasizing speaking, listening, reading and writing skills. No credit is given for JAPN101 without successful completion of JAPN102. Ms. Valentine/Offered every year

**JAPN103 INTERMEDIATE JAPANESE/LECTURE, DISCUSSION**

A continuation of first-year Japanese, emphasizing learning kanji, mastering more complex grammatical forms, and increasing fluency. Prerequisite: JAPN102 or permission. Staff/Offered every year

**JAPN105 ADVANCED JAPANESE/LECTURE, DISCUSSION**

Primary emphasis is on building critical vocabulary and understanding Japanese behavior patterns. Prerequisite: permission. Staff/Offered periodically

**JAPN180 JAPANESE CULTURE AND LITERATURE IN TRANSLATION/LECTURE, DISCUSSION**

The focus of the class is on 20th-century Japanese literature as a way of exploring Japanese culture and values. How have writers responded to the dramatic events of the past hundred years? How does literary art both reflect and interpret tradition amidst transformation? What's "Japanese" about the works we'll read, and what seems "universal"? How can these texts shed light on Japan's experience with the west, with modernism, war and defeat, affluence and postmodernism? What do they reveal about Japanese constructions of the self, of the nation? Ms. Valentine/Offered every other year

**JAPN190 JAPANESE WOMEN WRITERS**

Explores Japanese poetry and prose in translation, from the literary tradition of 10th- through 11th-century Japan, through the reawakening of women writers in the early modern period to contemporary writers popular both in Japan and abroad. Emphasis is on the cultural context of author and audience and the changing role of women in Japanese society. Ms. Valentine/Offered every other year.

**LAT101 INTRODUCTORY LATIN**

A beginner's course in the Latin language including, in the first semester, an introduction to the grammar and syntax of Latin with appropriate attention to Latin's role as parent to the Romance languages and source of much of the vocabulary of modern English. The second semester is primarily devoted to reading selections from suitable Latin texts such as the lyric poetry of Catullus or Horace, the historical works of Julius Caesar or Livy, the Vulgate Bible or selected medieval texts. No credit is given for LAT101 without successful completion of LAT102. Weekly lab required. Staff/Offered every year

**LAT103 INTERMEDIATE LATIN**

Vergil's "Aeneid" reviews the basics of Latin grammar through the close reading of selected passages from Vergil's "Aeneid." Investigation of relevant archeological and artistic material will supplement the Latin text in building a comprehensive picture of the artistic and political culture of Augustan Rome. Mr. Burke/Offered every other year

**LAT299 SUPERVISED READING IN PHILOSOPHICAL LATIN**

A close reading of selected philosophical texts in Latin. Mr. Pakaluk/Offered every semester

**SPAN101 ELEMENTARY SPANISH I, II/DISCUSSION**

For students with no more than one year of the language, this course develops basic skills in speaking, reading and writing Spanish. Meets for three hours per week; regular class assignments are supplemented by individual work in the Language Arts Resource Center (LARC). No credit is given for SPAN101 without successful completion of SPAN102. Ms. Acosta Cruz, Ms. Atienza, Ms. Montross, Staff/Offered every year

**SPAN103 ELEMENTARY SPANISH: INTENSIVE/ LECTURE, DISCUSSION**

An accelerated elementary course, intended for students who have had no more than two years of high-school Spanish. Three hours per week, plus individual work in the Language Arts Resource Center. Staff/Offered every year

**SPAN105 INTERMEDIATE SPANISH I/LECTURE, DISCUSSION**

An intermediate course intended for students with no more than four years of high-school Spanish. Integrates the essential aspects of Spanish in a structured manner, while at the same time reviewing grammar and enhancing skills in reading, writing and conversation. Also develops awareness and appreciation of Hispanic cultures. Prerequisite: successful completion of SPAN101 and 102, 103 or the equivalent. Discussion session required. Ms. Acosta Cruz, Ms. D'Lugo, Staff/Offered every semester.

**SPAN106 INTERMEDIATE SPANISH II/LECTURE, DISCUSSION**

Normally taken after SPAN105, SPAN106 further strengthens skills in the language through grammar reviews, readings on Hispanic themes and class discussions. Emphasis is on activities in reading, writing, speaking and conversational understanding as a preparation for more advanced work. Prerequisite: successful completion of 105 or the equivalent. Discussion session required. Ms. Acosta Cruz, Ms. Atienza, Ms. Montross, Staff/Offered every semester

**SPAN117 FIELD WORK IN THE LATINO COMMUNITY**

Offers an opportunity to work in an agency or project serving the Latino community in Worcester (the bilingual school program, Casa de la Comunidad, Worcester Legal Services, etc.). Advisers supervise the student work. Students keep a journal on the experience in which they examine language, culture and related problems of the bilingual



community. Students read works of Latino literature and write short papers in Spanish. Weekly meetings with instructor. Prerequisites: proficiency in Spanish; successful completion of course work in the field or fields related to the specific project area; permission of instructor. Offered for credit, but is not graded. Ms. Montross/Offered every year.

**SPAN127 PRACTICE IN ORAL AND WRITTEN SPANISH/LECTURE, DISCUSSION**

A transitional course between intermediate Spanish and the upper-level offerings for students with a strong background in Spanish (4-5 years of high school Spanish). Develops fluency and sophistication in spoken and written Spanish. Emphasizes practice in conversation, composition and selected grammar review. Prerequisite: SPAN106 or the equivalent. Ms. Acosta Cruz, Ms. D'Lugo, Staff/Offered every semester

**SPAN129 SHOCK OF THE NEW: REVOLUTION IN HISPANIC CULTURE/FIRST-YEAR SEMINAR**

Explores the ways in which the arts (literature, cinema and painting) are both transformative and transformed by major changes in ideology, science and technology, psychology, and society at large. Shock and change also happen when cultures contact and collide. Examples of topics covered in this course could be: the birth of cinema, the influence of Marxism in figures like Che Guevara, Fidel Castro and Pablo Neruda, Freud's influence in Dali and the surrealists, Frida Kahlo as a feminist icon, and Africa's influence on Picasso. Different topics and periods will be covered each semester. Taught in English. First year seminar. No prerequisites; restricted to first-year students. Ms. Atienza/Offered periodically

**SPAN131 READINGS IN HISPANIC LITERATURES/LECTURE, DISCUSSION**

Introduces modern Hispanic narrative, lyric, and dramatic literature. Studies authors of Spain and Latin America and their literary, social, cultural and political context. Readings illuminate such themes as cultural continuity and modernity, notions of norm and deviance in the Hispanic community and national identity. Since course content is variable, students may request permission to take the class twice. Conducted in Spanish. Prerequisite: SPAN127. Required for majors. Ms. Atienza, Ms. Acosta Cruz, Ms. D'Lugo, Mr. D'Lugo/Offered every semester

**SPAN133 STUDIES IN HISPANIC CULTURE/LECTURE, DISCUSSION**

A third-year course introducing students to the diversity of Hispanic culture through literature, history, the arts, Internet, and visual media. Focuses on one or two of the following national cultures: Chile, Cuba, Mexico, Puerto Rico, Spain, and Argentina. Conducted in Spanish. Prerequisite: SPAN127. Required for majors. Ms. Acosta Cruz, Ms. Atienza, Ms. D'Lugo, Mr. D'Lugo/Offered periodically

**SPAN134 LATINO LITERATURE AND MEDIA ARTS**

Explores the variety of expressions of Latino identity as a hybrid formation within U.S. culture. Unlike traditional Spanish-language literature, which is historically formed and rooted within a Hispanic national community, Latino culture generally functions between and around different cultures. It is a culture of migration, assimilation, resistance to the melting pot, as well as a unique expression of a new ethnicity in formation. Features Puerto Rican, Cuban-American, Mexican-American, Dominican-American and other cultural products. Not offered to first-year students. Conducted in English. Prerequisite: minimum one college-level course above 101/102 in Spanish language. Ms. Acosta Cruz, Mr. D'Lugo/Offered periodically

**SPAN140 SPANISH DRAMATIC EXPRESSION: PLAY PRODUCTION/LECTURE, DISCUSSION**

Acquaints students with the rhythms, intonations and gestures typical of contemporary spoken Spanish. Through study and presentation of two or more contemporary dramatic works, students gain practical experience in linguistic and cultural skills. Although some consideration is given to the texts as literature, the course is primarily a workshop in advanced oral Spanish. Prerequisite: SPAN127. Ms. Atienza, Mr. D'Lugo/Offered periodically

**SPAN141 SPANISH TRANSLATION WORKSHOP/LECTURE, DISCUSSION**

Introduces students to the basic issues involved in translation including considerations of cultural difference, language equivalencies, translation loss and ways to approach the source text. Among the texts translated are fragments of prose fiction, songs, magazine ads, product instructions, editorials, and movie dialogue (subtitles). Prerequisite: SPAN131 or permission. Ms. D'Lugo/Offered periodically

**SPAN236 WOMEN IN HISPANIC LITERATURE/LECTURE, DISCUSSION**

Topics include alienation with women's "culture," identity, family structure, violence against women, and women in the national imagination. Readings are from the Spanish and Latin-American tradition. Conducted in Spanish or English. Ms. Acosta Cruz, Ms. Atienza, Staff/Offered periodically.

**SPAN237 ADVANCED ORAL AND WRITTEN SPANISH/LECTURE, DISCUSSION**

An advanced language course offering a sophisticated review of grammar. Areas covered are: written composition, reading comprehension, vocabulary expansion, bilingual translation, and oral skills, such as pronunciation and intonation. Conducted in Spanish. By permission only. Required for majors. Ms. Acosta Cruz/Offered every other year

**SPAN239 HISPANIC CARIBBEAN FICTION/ LECTURE, DISCUSSION**

Examines literature, arts and media from Spanish language countries in the Caribbean Basin. Topics include: Afro-Antillean culture, colonialism and post-colonialism, gender studies, migrant sensibility and national identity. Conducted in Spanish. Ms. Acosta Cruz/Offered periodically

**SPAN242 THE LATIN-AMERICAN NOVEL/ LECTURE, DISCUSSION**

Readings and discussions of selected works by contemporary Latin-American novelists, emphasizing technical innovations in relation to social and political thematics. Critical, historical and cultural material provides a context for the creative surge reflected in 20th-century narrative practice. Prerequisite: SPAN131. Ms. D'Lugo/Offered periodically

**SPAN243 LATIN-AMERICAN ESSAY AND THOUGHT/LECTURE, DISCUSSION**

A cultural study of Latin-American ideas expressed in the essay genre. Looks at Latin-American essays from the 19th to 21st centuries. Explores issues of national identity, politics, colonialism and post-colonialism, ethnic minorities, women's status and globalization. Conducted in Spanish. Ms. Acosta Cruz/Offered periodically

**SPAN245 HISPANIC-AMERICAN SHORT STORY/LECTURE, DISCUSSION**

Introduces the tradition and development of short narrative in Hispanic America, from its beginnings in colonial chroniclers through the progressive refinements of theme, local color, style and narrative technique that led to fictions of the 20th-century "boom" and beyond. Readings include works by Rubén Darío, Horacio Quiroga, José Luis Borges, Carlos Fuentes, Julio Cortázar, Juan Rulfo, Rosario Ferré, and Luisa Valenzuela. Conducted in Spanish. Prerequisite: SPAN131. Ms. D'Lugo/Offered periodically

**SPAN246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION**

Surveys principal Spanish films and filmmakers of the past 50 years in the context of political and social change in Spain. Considers formulation of cultural ideology through franquista cinema in the 1940s and rise of opposition cinema 1950-1975, operations of film censorship, rise of regional film cultures in post-Franco Spain, and auteurism and national/international audiences of Spanish cinema. Topics vary each time the course is offered. Conducted in Spanish. Offered in English on an occasional basis. Mr. D'Lugo/Offered periodically

**SPAN248 STUDIES IN LATIN-AMERICAN CINEMA/ LECTURE, DISCUSSION**

Surveys film cultures, directors and works in Latin America, emphasizing developments in Argentina, Brazil, Cuba and Mexico. Examines politics of representation, cultural nationalism in Latin-American cinema, issues of authorship and alternative film practices in Third World cinema. Conducted in Spanish. Offered in English on an occasional basis. Mr. D'Lugo/Offered periodically

**SPAN249 STUDIES IN HISPANIC CINEMA/LECTURE**

Provides students who have already completed Spanish 246 or 248 the opportunity to further explore development of film and film culture in Spain or Spanish America. Topics vary each time the course is offered. Sample topics from Spanish cinema include: Spanish and foreign constructions of national identity; narratives of female empowerment; selected film auteurs (Almodóvar, Borau, Buñuel, Saura). Sample topics from Latin-American cinemas include: race, gender and ethnicity in various Latin-American cultures; cinema as political intervention; selected film auteurs (Tomás G. Alea in Cuba, Emilio "Indio" Fernández and Arturo Ripstein in Mexico and Maria Luisa Bemberg in Argentina. Mr. D'Lugo/Offered periodically

**SPAN259 EROS AND VIOLENCE: SPANISH DRAMA/LECTURE, DISCUSSION**

The Spanish Inquisition, the persecution of witches and Jews, the control of female sexuality, the conquest of the Americas . . . in this class we will study the connections among sex, power, religion and violence in the Hispanic world starting in 1492. Topics such as magic, love filters, the archetype of the witch, love sickness, crimes of passion, the myth of Don Juan and others will be analyzed in plays such as "La Celestina," "Fuenteovejuna" and "Don Juan", the "Trickster of Seville". Conducted in Spanish. Prerequisite: SPAN131. Ms. Atienza/ Offered periodically

**SPAN260 THE AGE OF CERVANTES/LECTURE, DISCUSSION**

Introduces Spanish literature and society in the Golden Age, from the era of Catholic monarchs to the death of Cervantes and beyond. Examines works in a variety of genres, tracing development of Spanish imagination from the flowering of Renaissance humanism through the Counter-Reformation and the birth of the baroque, a profile of brilliance and despair that characterizes Spain in these imperial centuries. Conducted in Spanish. Prerequisite: SPAN131. Ms. Atienza/Offered periodically

**SPAN265 LATIN-AMERICAN POETRY/LECTURE, DISCUSSION**

Beginning with colonial times and the poems of Sor Juana, students will read a generous selection of poems from all of Latin America. The course will emphasize the extraordinary flowering of poetic activity in the 20th century. Conducted in Spanish. Prerequisite: SPAN131. Staff/Offered periodically

**SPAN296 ADVANCED TOPICS/ SEMINAR**

Close readings and discussion of representative works by major Hispanic writers. Research project required. A required capstone course for senior majors. Variable topics. Conducted in Spanish. Ms. D'Lugo, Mr. D'Lugo, Ms. Acosta Cruz, Ms. Atienza/Offered every year

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**SCHOOL OF GEOGRAPHY**

Clark's School of Geography is ranked as a Tier 1 undergraduate geography program by "Rugg's Recommendations on the Colleges" (22nd edition, 2005). The undergraduate program provides an academic environment characterized by small class sizes, close interactions with faculty, and opportunities for independent study and research. The School offers two undergraduate majors, Geography and Global Environmental Studies, as well as minors in Geography and Global Environmental Studies, and a concentration in Earth Systems Science as part of the Environmental Science major at Clark.

The Graduate School of Geography offers a traditional doctoral program, in addition to an accelerated master's degree program for its qualified students, leading to an M.A. in Geographic Information Science. In collaboration with Clark's International Development, Community and Environment Department, the Graduate School of Geography also offers an M.A. in Geographic Information Sciences for Development and Environment.

Established in 1921, The Graduate School of Geography is consistently ranked among the elite geography programs in North America and focuses primarily on doctoral training. As noted above, it also shares a joint M.A. in Geographic Information Sciences for Development and Environment with Clark's International Development, Community and Environment Department.

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**GEOGRAPHY****Program Faculty**

Jody Emel, Ph.D. -*Chair*  
David Angel, Ph.D.  
Yuko Aoyama, Ph.D.  
J. Ronald Eastman, Ph.D.  
Karen Frey, Ph.D.  
Susan Hanson, Ph.D.  
Douglas Johnson, Ph.D.  
Roger Kasperson, Ph.D.  
Dominik Kulakowski, Ph.D.  
Laurence A. Lewis, Ph.D.  
Deborah Martin, Ph.D.  
James T. Murphy, Ph.D.  
Richard Peet, Ph.D.  
Colin Polsky, Ph.D.  
Robert Gilmore Pontius Jr, Ph.D.  
Samuel Ratick, Ph.D.  
Dianne Rocheleau, Ph.D.  
John Rogan, Ph.D.  
B. L. Turner, Ph.D.  
Christopher A. Williams, Ph.D.

**Adjunct Faculty**

Jacqueline Geoghegan, Ph.D.

**Affiliate Faculty**

Robert Kates, Ph.D.



## Emeriti Faculty

Martyn Bowden, Ph.D.  
Gerald Karaska, Ph.D.  
Duane S. Knos, Ph.D.  
William A. Koelsch, Ph.D.  
Laurence A. Lewis, Ph.D.  
Robert Mitchell, Ph.D.  
Henry J. Steward, Ph.D.

## Staff

Joanne Miller: Managing Editor, *Economic Geography*  
Beverly Presley, A.M.L.S.: Map and Geography Librarian

## Program Overview

Geography and its links to Clark's newest majors, Global Environmental Studies and Environmental Science, takes students into the world of integrated science by focusing on the relationships between people and their environments, as well as offering the lens of geographical information systems to explore these relationships. Students work on problems of sustainable development; the livability of cities and the causes and consequences of urban sprawl; climate change; local consequences of economic globalization; social consequences of climate change; and politics, gender, and livelihood chances. Majors also have the opportunity to become experts in GIScience (geographic information science).

Special facilities available to students include the Jeanne X. Kasperson Research Library at the George Perkins Marsh Institute; the Guy H. Burnham Map and Aerial Photograph Library, the Clark Labs for Cartographic Technologies and Geographic Analysis, J.K. Wright GISc Lab, and an earth-science teaching and research laboratory.

## The Clark Advantage

Geography majors, Global Environmental Studies (GES) majors and Environmental Science (ES) majors concentrating in Earth Systems Science (ESS) have the opportunity to work on research projects with faculty members and graduate students in one of the most prestigious graduate programs of geography worldwide. Summer Fellowships are available for qualified students to participate in the Human-Environment Regional Observatory (HERO) program, an intensive summer academic-year research effort focused on environmental change in New England. Eligible majors also have the opportunity to enter the tuition-free, accelerated M.A. in GIScience program. Other accelerated M.A. programs include International Development and Social Change, Environmental Science and Policy, and Community Development and Planning.

Geography, GES, and ESS undergraduates are served by the Clark University Geography Association (CUGA) and Gamma Theta Upsilon, an international geographic honors society.

CUGA is the voice of Geography, GES, and ESS majors, with student representation on the undergraduate studies committee and the opportunity to attend departmental meetings. CUGA representatives are able to vote and give their ideas and opinions on various topics that concern undergraduate majors. They also attend field trips and periodically have group gatherings to discuss topics of interest to geography majors, such as research, internships, courses and future jobs.

Gamma Theta Upsilon is an elite international honor society; initiates must have completed a minimum of three geography courses, have a B average in geography, rank in the upper 35% of their class, and

have completed at least three semesters or five quarters of college course work. For more information on Gamma Theta Upsilon please see their Web site at [www.gtuhonors.org/](http://www.gtuhonors.org/).

## Undergraduate Requirements

Students majoring in geography take a minimum of 10 Geography courses in accordance with the following guidelines:

### 1. Four core courses.

Core courses emphasize core geographic concepts and ways of creating knowledge; courses in the core are designed to help build frameworks for understanding the world. Students select one core course from each of the following four broad disciplinary core areas

- **Nature and Society:** Analyzes the ways that human societies have used, shaped, and constructed nature; impacts of societies, economies, and cultures on ecological systems.

#### Core courses in Nature-Society:

GEOG017 Culture, Place, and Environment  
GEOG022 Why Global Warming Matters (First-Year Seminar FYS)  
GEOG088 Light My Fire: The Burning of America (FYS)  
GEOG090 Native Americans and Natural Resources (FYS)  
GEOG105 The Keeping of Animals: Patterns of Use and Abuse  
GEOG125 Suburban Sprawl under the Microscope (taught as FYS & Lecture)  
GEOG126 Living in the Material World: The Political Geography of Resource Development  
GEOG136 Gender and Environment  
GEOG179 Global Environmental Justice  
GEOG180 Earth Transformed by Human Action  
GEOG197 Native Americans and Natural Recourses (Lecture)

- **Globalization, Cities and Development:** Examines the ways that space and location shape economic, sociopolitical, and cultural life; ways that economic, sociopolitical, and cultural factors shape space and location; relationships between these processes and the dynamics of urban life.

#### Core courses in Globalization, Cities and Development:

GEOG016 Introduction to Economic Geography  
GEOG020 American Cities: Changing Spaces, Community Places  
GEOG050 Africa Today (FYS)  
GEOG052 Global Change, Regional Challenges  
GEOG107 Miracles of Asia: Economic Growth in Global Contexts  
GEOG127 Political Economy of Development  
GEOG152 Geography of Globalization (First-Year Seminar)  
IDND066 Global Society

- **Earth Systems Science.** Examines how Earth systems (ecosphere, atmosphere, hydrosphere, and lithosphere) naturally function, how these systems interact with one another, and how they are affected by human activities.

#### Core courses in Earth Systems Science:

GEOG035 The Natural Environment of New England  
GEOG101 Introduction to Environmental Geology  
GEOG102 Weather & Climate  
GEOG104 Earth Systems Science  
GEOG114 Introduction to Geomorphology  
GEOG115 Introduction to Hydrology  
GEOG116 Forest Ecology  
GEOG119 Arctic System Science

- **Geographic Information Science.** Geographic Information Science is concerned with the acquisition, analysis, and communication of geographic information; principles and techniques important in cartography, remote sensing, geographic information systems, and spatial analysis.

**Core courses in Geographic Information Science:**

GEOG087 Introduction to Environmental Information Systems  
GEOG190 Raster GIS

Each year, several 000- and 100-level courses are designated as core courses in each of these areas. In special cases, a 200-level course may be used to fulfill a core course requirement, subject to the approval of the student's adviser and either the undergraduate adviser or the director of the school.

**2. Two skills courses.**

All geography majors take Geog 141 Research Methods (offered each year) and one additional course in a skill area appropriate to the student's area of specialization, as detailed in their learning plan (discussed below). The adviser's signature on the learning plan signifies formal approval of this elective skills course. With the approval of the student's adviser, a comparable skills course in another department can be substituted. *Students substituting a skills course from another department will need to take an additional geography course to ensure that a total of 10 geography courses are taken.*

**Geography Skills Courses:**

GEOG110 Introduction to Quantitative Methods  
GEOG141 Research Design and Methods in Geography  
GEOG190 Raster GIS  
GEOG206 Vector GIS  
GEOG247 Intermediate Quantitative Methods in Geography  
GEOG260 Quantitative Modeling  
GEOG282 Advanced Remote Sensing

**3. Four specialization courses.**

Geography majors take four specialization courses, three of which must be at the 200 level and one of which may be either at the 100 or 200 level. Specialization courses are subject to approval by the student's adviser and must reflect a logical combination of courses as specified in the formal learning plan (see below). Formal approval of the elective specialization course is implied by the adviser's signature on the learning plan.

**Geography Specialization Courses:**

GEOG206 Vector GIS  
GEOG216 Field Methods for Environmental Science  
GEOG222 Why Global Warming Matters  
GEOG224 Economy & Environment  
GEOG226 Who Fears What and Why: Social Theories of Environmental Risks & Hazards  
GEOG232 Landscape Ecology  
GEOG234 The Geography of Fire  
GEOG237 Feminism, Nature & Culture  
GEOG257 Internet Geography  
GEOG258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century  
GEOG260 Quantitative Modeling  
GEOG261 Decision Methods for Environmental Management Policy

GEOG263 Climate System & Global Environmental Change  
GEOG271 Groundwater Hydrology  
GEOG274 Africa's Development in Global Context  
GEOG277 Gender, Environment & Development  
GEOG279 GIS & Land Change Science  
GEOG280 Urban Ecology  
GEOG282 Advanced Remote Sensing  
GEOG285 Spatial Database Development  
GEOG289 Development Policy  
GEOG293 Introduction to Remote Sensing  
GEOG397 Advanced Topics in GIS

**4. Research Applications Experience.**

To fulfill the research applications requirement all geography majors must complete an independent research project and present the findings at a public event at Clark (e.g., Academic Spree Day, a Departmental poster session (offered every term)) or at other appropriate venues (e.g., professional meetings). All students must clearly articulate the problem being analyzed and the project must involve research design, data collection, analysis, and a reporting of the results through the public presentation. The research applications requirement can only be met after a student has completed GEOG 141-Research Methods (or an approved equivalent from another program). A research applications project can be conducted through a research project that is part of any 200-level course in geography or through any other research project where the student is directly advised by a faculty member in the School of Geography (e.g., directed study, honors thesis, or HERO project).

*To register for GEOG235 Research Applications Experience see instructions below.*

**5. The Capstone Experience.**

The capstone experience enables majors to link their particular interests/specializations to established schools of thought in the discipline of geography. To meet the requirement, students will write a 5-page (minimum) literature review as part of any 200-level geography course (including directed studies, HERO, or an honors thesis); a course that will ideally be taken during the student's final year. The literature review will situate the student's specialization in the major within wider trends and traditions in the discipline of geography. Specific guidance on how to write this review will be given by the professor leading the course or supervising the research project that is associated with the capstone experience. If desired, and as determined by the supervising professor, the capstone paper may be factored into the final grade for a course.

*To register for GEOG236 Capstone Experience see instructions below.*

**Instructions for Research Applications Experience & Capstone Experience Completion**

Student must choose a 200-level course through which to fulfill each requirement.

- I. Students must declare, in writing, their intention to meet the research applications requirement or capstone through the course at least two days prior to the end of the add-drop period of the semester when they wish to get credit. The declaration must be given to, and approved by, the professor teaching the course or advising them on their research applications or capstone experience.



II. Students must register for GEOG235 Research Applications Experience or GEOG236 Capstone Experience, both are pass/no-credit courses run by the Director of Undergraduate Studies (DUS) in the given year.

- a. The DUS will create a space for the student in GEOG235 or GEOG236 once she/he is notified by the student's project adviser (via email). In this email notification, the supervising professor will briefly describe the research applications project or capstone experience (in one or two sentences) and a copy of this email will be placed in the student's file as evidence of the agreement between the professor and the student.
- b. It is the student's responsibility to make sure that their adviser notifies the DUS. Once the DUS has given the student permission for GEOG235 or GEOG236 the student must then formally register through Banner Web for the course.

III. Once the student has successfully met the expectations as agreed to with the advising professor, the student must make sure that the advising professor notifies the DUS that a passing grade should be administered. It is the student's responsibility to make sure their adviser notifies the DUS of her/his successful completion of the project or capstone paper.

IV. The Research Applications Experience and Capstone Experience are required for ALL students majoring in Geography.

**Special Note:** Professors have the right to decline a Research Applications or Capstone Experience request from any student and no faculty member is expected to have more than 5 research applications or capstone students in any semester. Thus it is imperative that a student carefully considers the professors and courses she/he will work with and use to meet these requirements and that she/he contacts the relevant professor in the semester prior to the beginning of the Research Applications or Capstone Experience Course.

## 6. Learning Plan and Learning Synopsis.

Each student is required to prepare a formal learning plan upon declaring the major. This plan, which can take the form of the major planning sheet in the program guide, identifies the courses the student intends to take (and in which semesters) in order to complete the major requirements. This plan can and should be regularly updated, with files retained by the major adviser and/or the undergraduate coordinator, as well as by the student.

In addition by January 31 of the senior year, students must complete a learning synopsis. The synopsis will provide a comprehensive assessment of the Geography major as experienced by the student. Specifically, the synopsis describes and points to evidence of student achievement according to the goals of the major: 1) understanding the purpose and scope of the discipline of geography; 2) articulating relationships of people, culture, and society with the biophysical environment, or in relation to concepts of space and place; 3) mastery of appropriate skills; and 4) expertise and understanding of a particular topical focus within geography.

## 7. Requirements for the Dual Major in Geography.

In accordance with University guidelines, the requirements for a dual major are identical to those of the individual major.

## Honors Program

The honors program in geography provides qualified students majoring in geography and global environmental studies an opportunity to conduct a major independent research project on a topic of interest.

### Requirements

- Complete a two-semester independent honors project (thesis) or counterpart in accepted "selective" program, such as HERO, the final product of which is evaluated by a Honors Committee.
- Present a poster or paper related to the honors project at Academic Spree Day or at a relevant professional meeting.
- Project must be supervised by a geography faculty member and one additional faculty member; the two members constitute the student's Honors Committee.

### Program Candidate Qualifications

- Open to juniors with a minimum GPA of 3.25 overall and 3.5 GPA in the geography major by the end of first semester of the junior year of study, and who demonstrate the appropriate research background to undertake independent geographic research.
- Honors participants should have taken GEOG141 Research Methods, or its equivalent, before entering the program.

### Applying for Honors

- Notification of eligibility and information about the program is forwarded to all junior students in November of the junior year.
- Students wishing to start their honors project in the spring semester of the junior year must notify the undergraduate program assistant by December 15. Those students wishing to start their honors project in the fall semester of their senior year must notify the undergraduate program assistant by March 15.
- Acceptance to the Honors Program is considered provisional until grades for the fall semester (junior year) are received. If these grades enable the student to continue meeting the GPA standards described above, she/he becomes formally accepted to the program.
- Honors students register for GEOG297 Directed Research (Honors), or HERO for two semesters -spring/fall of the junior-senior year or fall/spring of the senior year.

## Geography Minor

Students wishing to minor in Geography must complete the following components of the regular program of the major (for a total of seven courses in Geography):

**Two core courses:** Core courses emphasize core geographic concepts and ways of creating knowledge; courses in the core are designed to help build frameworks for understanding the world.

Each year, several 000- and 100-level courses are designated as core courses in each of these areas. In special cases, a 200-level course may be used to fulfill a core course requirement, subject to the approval of the student's adviser and either the undergraduate adviser or the director of the school.

Each of the core courses must be selected from one of the following broad disciplinary divisions:

- **Nature and Society**

Analyzes the ways that human societies have used, shaped and constructed nature; impacts of societies, economies and cultures on ecological systems.

- **Globalization, Cities and Development**

Examines the ways that space and location shape economic, sociopolitical, and cultural life; ways that economic, sociopolitical and cultural factors shape space and location; relationships between these processes and the dynamics of urban life.

- **Earth Systems Science**

Examines how Earth systems (ecosphere, atmosphere, hydrosphere, and lithosphere) naturally function, how these systems interact with one another, and how they are affected by human activities

- **Geographic Information Science**

Geographic Information Science is concerned with the acquisition, analysis and communication of geographic information; principles and techniques important in cartography, remote sensing, geographic information systems and spatial analysis.

**One skills course:** Each student undertaking the geography minor is required to take at least one geography skills course appropriate to the student's area of specialization. This course must be approved by the student's adviser.

**Three specialization courses:** Two specialization courses must be at the 200 level and one may be at the 100 or 200 level. The faculty adviser must approve the specialization courses selected.

**One elective geography course:** The seventh course in the geography minor is an elective that can be taken at any level.

### **Accelerated Degree Program**

Geography offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

### **Graduate Program**

The Graduate School of Geography has awarded more doctorate degrees than any other geography program in the United States. We invite applications for admittance to our program from students interested in pursuing a PhD degree. Students are not accepted for master's studies only, although many choose to earn that degree en route to the doctorate, and the M.A. is also available to those who leave the program early. For information on the Master of Arts in Geographic Information Sciences for Development and Environment, please see the program's Web site at [www.clarku.edu/departments/idce/gis](http://www.clarku.edu/departments/idce/gis).

Applicants with or without prior training in geography are welcome to apply to the PhD program. This normally takes five years to complete, including writing and defending a dissertation. Depending on their concentrations, students may be required to improve their knowledge of geography, cartography, quantitative methods or research methods. Graduate Record Examination scores (verbal, quantitative and analytical) are required of all American and Canadian students, as well as international students who are in an academic program where English is the first language. TOEFL scores or results of another English proficiency test and the TOEFL test of spoken English (TSE) are required for students from countries in which English is not the first language. The deadline for graduate applications is December 31. All applicants receive careful consideration from a faculty-student admissions committee, which meets early in the spring semester to

evaluate candidates. For further information and/or application materials (which may be downloaded), please view our Web site at [www.clarku.edu/departments/geography](http://www.clarku.edu/departments/geography) or contact the graduate admissions coordinator in writing or by telephone: (508) 793-7337 or 7336; fax: (508) 793-8881; or e-mail [geography@clarku.edu](mailto:geography@clarku.edu).

### **Requirements**

Applicants should request a copy of current guidelines and degree requirements from the graduate admissions coordinator ([geography@clarku.edu](mailto:geography@clarku.edu)).

The graduate curriculum provides an opportunity for students to pursue studies across the full array of geography: human geography (space-society), human-environment geography (nature-society), biophysical geography, and the mapping sciences. Students are encouraged to explore faculty and research interests across these geographies in combination with work in complementary fields and disciplines within and outside of Clark.

Requirements include 16 course credits (eight for those entering with an M.A.); satisfactory completion of doctoral examinations; fulfillment of a skills requirement; and completion, acceptance and successful defense of a dissertation. Also required are three years of residence (or two and one-half for those entering with an M.A. in geography). The normal course load is three courses per semester. The usual sequence students follow is: course work, doctoral exam, research proposal, and dissertation research, write up and defense.

In the first year, students normally complete the two required courses, GEOG318 Explanation in Geography and GEOG368 The Development of Western Geographic Thought, and take additional courses to help refine their interests. All first-year students must register for GEOG315 Professional Training for Geographers, a full-year noncredit seminar that examines graduate studies and career needs including grant preparation, teaching skills techniques and job interviewing as well as introducing the faculty of the school to the student body. Students then meet with advisers for evaluation and planning.

In the second year, students are encouraged to fulfill the skills requirement, to prepare for doctoral exams and to begin dissertation proposal formulation. Course work normally includes seminars, directed readings and directed research. A review of the student's progress is held at the end of the year.

- Students who have not already completed their doctoral exams and dissertation proposal are expected to do so in the third year of study.

Students must demonstrate, through course work or examination, proficiency in two of the following areas: multivariate statistics, research design/research methods, geographic information systems, foreign language, or other courses approved by the student's faculty adviser and the director of the Graduate School of Geography.

The doctoral exam assesses the competency of a graduate student in one major and two minor fields. Competency is defined as an understanding of the substantive content and range of theoretical approaches within each subfield. Students must be able to critique the alternative research traditions and defend the theoretical frameworks they adopt. They are expected to have in-depth knowledge of the major field, to master a survey of the first minor field, and to demonstrate detailed knowledge of a single subfield in the second minor.

The doctoral examination is conducted orally. The examination in the major field lasts approximately one-and-a-half hours, and each minor takes about 45 minutes. At the student's discretion, the major and/or first minor may have a written component, which is in addition to the oral examination.



A formal proposal for dissertation work must be completed and approved by a committee of at least four faculty (two readers and two reviewers), three of whom are full-time faculty members of the Graduate School of Geography. The chair of the committee is always a full-time member of the Graduate School of Geography. The proposal is approved after a formal defense before the committee.

The process of conducting and writing up the dissertation research involves close interaction between student and committee members. After extensive criticism and rewriting, a draft thesis is defended at a working session of the committee. A final version incorporating changes suggested at the draft stage is submitted for approval by the dissertation committee. At the discretion of the committee, the director and the student, a public presentation and dissertation signing ceremony may be scheduled.

For more detailed information regarding the Graduate School of Geography, please visit:  
<http://clarku.edu/departments/geography/phd.cfm>.

## Courses

### **BIOL373 SEMINAR IN FOREST ECOLOGY/SEMINAR**

Understanding how ecosystems function and how they change in response to human activities and normal Earth system fluctuations are important goals of modern biogeographical and ecological research. Beyond having inherent scientific value, such inquiries have become integral to national and international policies and practices of ecosystem management. This graduate-level seminar considers contemporary themes in the field of forest ecology. The seminar will examine primary literature dealing with topics such as the application of the knowledge of historic ecosystem conditions to ecosystem restoration and the effects of global climate change on forest ecosystems. Mr. Kulakowski/Offered every year

### **GEOG011 THE WORLD ACCORDING TO GEOGRAPHY/LECTURE, DISCUSSION**

Introduces students to the breadth of the discipline of geography. The course explores the four themes of geography: nature-society interactions; globalization, cities and development; earth system science; and geographic information sciences. The course explores several critical applied geographical research themes, including global warming, economic globalization, sustainable development and regional studies. Fulfills the Global Comparison Perspective (GP). Staff/Offered periodically

### **GEOG016 INTRODUCTION TO ECONOMIC GEOGRAPHY/ LECTURE, DISCUSSION**

An introduction to the study of industrial geography and regional development. Uncovers the hidden spatial logic behind the emergence of manufacturing zones, shopping malls, financial centers and suburban residential zones. Explores how these locational patterns are being affected by globalization. Discussions will focus on the role of technological progress, industrial organization and government policy in shaping the locations of production and services, and how they affect regional growth and decline. Assignments include an in-depth research report on globalization that focuses on one or more aspects of multinational corporation's strategic and locational behavior and its impacts on regional economies. Fulfills the Global Comparison Perspective. Ms. Aoyama, Mr. Murphy/Offered every year

### **GEOG017 CULTURE, PLACE AND THE ENVIRONMENT/ LECTURE**

Ecological and historical approach to cultures and cultural change in a global and spatial context. Broad themes and problems of North America are emphasized: adaptation to "natural" environment; culture

in prehistory; migration; creation of cultural areas; fire as a cultural artifact; world views of primitive, traditional and industrial culture; cultural landscape; cultural geography of the United States. One weekly discussion section. Fulfills the Global Comparison Perspective. Mr. Johnson/Offered every year

### **GEOG020 AMERICAN CITIES: CHANGING SPACES, COMMUNITY PLACES/ LECTURE, DISCUSSION**

This course examines the history and contemporary processes of urbanization, primarily in the North American context, with particular attention to the geography of these processes, which results in the differentiation of space and the creation of distinct places. The course covers a range of topics relevant to cities, including historical development, governance, social patterns, economics, planning, contemporary problems and the linkages among all of these. We examine the geography of urbanization at several scales, ranging from the development of the North American urban system to the experiences of neighborhoods within cities. A core course in Globalization, Cities and Development in the geography major. Fulfills the Historical Perspective (HP) requirement. Ms. Martin/Offered every year

### **GEOG022 WHY GLOBAL WARMING MATTERS/LECTURE, DISCUSSION, FIRST YEAR SEMINAR**

Climate change (global warming) is the single greatest problem facing the planet today. Or is it? In this seminar students will peel away the rhetoric surrounding global climate change, so that they may be able to understand why this issue matters not only to international policy makers but also to individuals and their daily lives. Topics for exploration will focus on the causes and consequences of climate change and justification (and options) for action. The breadth of areas the climate-change issue intersects - including but not limited to politics, economy, ecology, epistemology, ethics - suggests that global warming is a crucial integrating theme for the discipline of geography and, more importantly, the intellectual foundation of a well-rounded student. Fulfills the Values Perspective (VP). First preference for enrollment will be given to students interested in the following Clark majors: geography, global environmental studies, and environmental science and policy. Others will be admitted on a space-available basis. Offered periodically as a first year seminar and as a lecture course. Mr. Polsky/Offered periodically

### **GEOG035 THE NATURAL ENVIRONMENT OF NEW ENGLAND**

This course applies principles of Earth System Science to examine the natural environment of New England. It serves as both a tour of New England's physical natural environment and as an introduction to Earth System Science. Topics include interactions among the Earth systems as they relate to New England's biodiversity, forests, and land use (the biosphere); aquatic ecosystems and water resources (the hydrosphere); weather and climate (the atmosphere); and topography and its causes (the lithosphere). Fulfills the Science Perspective. Mr. Kulakowski/Offered every year

### **GEOG050 AFRICA TODAY: CHALLENGES AND OPPORTUNITIES/ FIRST-YEAR SEMINAR**

Africa is arguably one of the most poorly understood and misrepresented geographic regions of the world despite its growing significance in and influence on world politics and the global economy. This seminar will expose students to Africa's tremendous potential and enlighten them about some of the region's most significant challenges. Through case studies on key issues, we will explore the region's geography and critically examine the causes for and prospective solutions to challenges such as economic and urban development, public health, politi-



cal conflict, environmental degradation, cultural survival, human rights, and gender equality. In doing so, the seminar will confront mainstream stereotypes about African peoples, societies, and economies; will help students better understand the obstacles to and opportunities for development in economically poor countries; and will demonstrate how global economic and political transformations are leading to complex and diverse changes in African communities. Fulfills the Global Perspective. Mr. Murphy/Offered periodically

**GEOG052 GLOBAL CHANGE, REGIONAL CHALLENGES**

Applies a regional perspective to explore important questions related to our planet and its people including: What are the key challenges facing communities, environments and societies in different regions of the world today? Is the world becoming more culturally homogenous or more fragmented? Why is the global distribution of wealth so uneven and how might poorer regions "catch up" to wealthier regions? How does the physical and human context of a region influence its ability to benefit from globalization? What factors are driving regional conflicts and how might peaceful resolutions be achieved? Focuses on eight regions – Europe, Russia/Central Asia, Middle East, Sub-Saharan Africa, Latin America, East Asia, and South/Southeast Asia. One or two significant issues will be focused on in each region such as gender equality, human rights, environmental sustainability, political change, economic development, public health, and/or human rights. Fulfills the Global Comparative Perspective. Mr. Murphy/Offered every year

**GEOG087 INTRODUCTION TO ENVIRONMENTAL INFORMATION SYSTEMS/LECTURE, LABORATORY**

An introduction to fundamental concepts of environmental geographic information science, and a comprehensive survey of the technologies and institutions involved in producing and using geographic data. These include the global positioning system, aerial surveys and photogrammetry, topographic mapping, social surveys such as the U.S. Census, and satellite remote sensing. Overall, this class is a combined introductory class to Geographic Information Systems (GIS), cartography and remote sensing. Fulfills the Science Perspective. Mr. Rogan/Offered every year

**GEOG088 LIGHT MY FIRE: THE BURNING OF AMERICA/FIRST-YEAR SEMINAR**

Wildfire has always been, and will always be a 'HOT' topic. This course will be one of the first of its kind offered at a university. It will allow students to examine wildfire from a physical, biological and cultural perspective. Specifically, the following issues will be addressed: How have humans evolved with fire? How has fire helped shape human political and cultural development? What is combustion? Why do things burn? Why is Earth called "The Fire Planet?" What is pyromania? How does landscape influence wildfire burn patterns? How can geographic data be used to study wildfire? Why has the United States Government policy been so erratic with regard to wildfire? How do fires in America compare to fires in other areas? Fulfills the Scientific Perspective requirement. Mr. Rogan/Offered every other year.

**GEOG101 INTRODUCTION TO ENVIRONMENTAL GEOLOGY/LECTURE, LABORATORY**

An introduction to the basic principles of physical, historical and environmental geology. Topics covered include the formation of earth and earth materials, plate tectonics, landform evolution, glaciology and the history of life. The relevance of geology for current issues such as geologic resources, water quality and global change is emphasized. Fulfills the Science Perspective. Ms. Frey, Staff/Offered every other year

**GEOG102 WEATHER AND CLIMATE/LECTURE, LABORATORY**

Understanding controls of weather: insolation, evaporation, wind, and topography; the climates that result; and how they influence human activities. Students are also introduced to fundamentals of scientific inquiry and knowledge with exposure to observational methods, data analysis, and forecasting. Fulfills the Science Perspective. Mr. Williams/Offered every year

**GEOG104 EARTH SYSTEMS SCIENCE/LECTURE, LABORATORY**

An introduction to the structure and function of the earth system, focusing on the biosphere-that portion of the system sustaining life. Topics covered are the connections among the terrestrial surface, oceans, and atmosphere that create and sustain the climates and biomes of the world and provide the ecosystem services. Fulfills the Science Perspective requirement. Mr. Kulakowski/Offered every year.

**GEOG105 KEEPING OF ANIMALS: PATTERNS OF USE AND ABUSE/LECTURE, DISCUSSION**

Animals play a prominent role in human life. They sustain us, entertain us and provide companionship and solace. Pests and predators compete with humans for food, while harmful diseases lurk unseen in animal reservoirs. Images of goodness and evil reflect the ambivalent attitudes and cultural prejudices that govern human responses to animals. This course explores the cultural, historical and ecological interactions between people and animals, and balances utilitarian and ethical perspectives on current patterns of animal use and abuse. Fulfills the Global Comparison Perspective. One weekly discussion section. Mr. Johnson/Offered every other year

**GEOG107 MIRACLES OF ASIA: ECONOMIC GROWTH IN GLOBAL CONTEXTS/LECTURE, DISCUSSION**

Explores the reasons behind the rapid rise of Asian economies and their sudden crises. Discussions include the impacts of rapid industrialization on the standard of living, housing, role of the state, multinational corporations, urban problems and ethnic relations in east, south-east and south Asian countries. Examines the role of Japan and the United States in Asia's industrialization, the impacts of colonialism in socio-economic-political transformation in the Asia-Pacific region, business-government relations in Newly Industrializing Economies, and the recent phenomenal growth of China and India. Fulfills the Global Comparison Perspective. Ms. Aoyama/Offered every year

**GEOG114 INTRODUCTION TO GEOMORPHOLOGY/LECTURE**

Examines the processes resulting in landform diversity. Emphasizes fluvial processes and climate/landform relations. Prerequisite: GEOG014 or a geology course, or permission of instructor. Fulfills the science perspective. Staff/Offered periodically

**GEOG115 INTRODUCTION TO HYDROLOGY/LECTURE, DISCUSSION**

Overview of what governs the hydrological cycle's major components of precipitation, evapotranspiration, soil moisture, surface water, and groundwater. Core principles of physical hydrology will be introduced including rainfall-runoff processes, surface and subsurface storage and flows, and land-atmosphere exchange. Students will also learn about human influences on the water cycle, and consider management of water resources at field to watershed scales. Mr. Williams/Offered every year

**GEOG116 FOREST ECOLOGY/LECTURE, DISCUSSION**

Understanding how ecosystems function and how they change in response to human activities and normal Earth system fluctuations are important themes in contemporary natural sciences. Beyond having inherent scientific value, such knowledge has become integral to



national and international policies and practices of ecosystem management. This course will provide an important foundation in forest ecology by considering the function, structure, and composition of forest ecosystems. Specific topics will include forest succession, historical ecology, disturbance ecology, nutrient cycling, and the influence of climate and environmental heterogeneity on forest patterns and dynamics. The successful completion of GEOG104 Earth System Science is a prerequisite for this course. Mr. Kulakowski/Offered every year

**GEOG119 ARCTIC SYSTEM SCIENCE / LECTURE, DISCUSSION**

The Arctic is now experiencing some of the most rapid and severe climate change on earth. Over the next century, climate change is expected to accelerate, contributing to major physical, ecological, social, and economic changes, many of which have already begun. Changes in arctic climate will also affect the rest of the world through increased global warming and rising sea levels. This course focuses on the interfaces of systems in the Arctic, including land-atmosphere-ocean-ice-human interactions. Topics include arctic hydrology, climatology, biogeochemical cycling, permafrost, glacier/ice sheet dynamics, terrestrial and marine ecology, sea ice, physical oceanography, and human-environment interactions. The course provides students a perspective on arctic climate variability over past, present, and predicted future time scales. Ms. Frey/Offered every year

**GEOG125 SUBURBAN SPRAWL UNDER THE MICROSCOPE/LECTURE, DISCUSSION, FIRST YEAR SEMINAR**

"Suburban Sprawl" is perhaps this country's most important source of environmental and social changes. But what exactly is suburban sprawl? Can we agree how to observe it, measure it, or even simply define it? Or is sprawl in the eye of the beholder? Whatever its definition, why should we care? In this course students will wrestle with the elusive concept of suburban sprawl in an effort to achieve two overarching goals: (1) to generate first-order explanations of the causes and consequences of sprawl, and (2) to develop meaningful measures of sprawl. To achieve both overarching goals, students will not only engage provocative texts, they will also collect, process, and analyze data for a selected place, so that students can draw concrete conclusions from applying abstract concepts. Students will also be expected to demonstrate excellence on four specific goals: (1) describing the historical evolution of US suburban development; (2) identifying and evaluating the most important themes in scholarly debates about the causes and consequences of suburban development; (3) collecting and processing data relevant to the study of suburban sprawl; and (4) using spreadsheet and Geographic Information Science analytical techniques to characterize the trends in the collected data. There are no prerequisites for this First-Year Seminar; students do not need to enter the course with a background in suburban development, contemporary environmental problems, or data collection/analysis. We will learn by doing. Mr. Polsky/Offered periodically

**GEOG126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION**

Focuses on institutions that govern the development, allocation and use of natural resources like water, minerals, trees and animals. Emphasizes approaches used by geographers to study natural resources (e.g., commodity chains, geopolitical analysis, ecological footprints). Case studies provide an opportunity to examine differences between societies (or economies) and between specific resource issues. Oil and gas in the Middle East and the Caspian, water in the western United

States, Israel or India; gold in Tanzania, the United States and South Africa; and animal use in India, Great Britain and China are some examples of typical cases. Fulfills the Global Comparison Perspective. Ms. Emel/Offered every other year

**GEOG127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE**

Why do some people die from over-consumption and others from poverty and starvation? Development theories try to answer this fundamental question. This course critically examines these theories, including classical, neoclassical and Keynesian economies; modernization theory; dependency and world systems theories; postdevelopmentalism; feminism and feminist critiques of development. The course takes students with an initial interest especially in Third World development to a high level of critical understanding. Fulfills the Global Comparison perspective. Mr. Peet/Offered every year

**GEOG136 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION**

Explores how gender is reflected in the landscape, in our settlement and land-use patterns, in environmental history, and in our present ecological science and practice from the global to the local level. Combines lectures, readings, discussions, films and local field trips. Reviews feminist and other alternative explanations of the gendered nature of knowledge, access, use and control of space and resources in environments - past, present and possible. Regional focus on New England. Fulfills the Values Perspective. Ms. Rocheleau/Offered every year

**GEOG141 RESEARCH DESIGN AND METHODS IN GEOGRAPHY/LECTURE, DISCUSSION**

Focuses on ways empirical social-science research is conducted. Students study problems, methodological strategies and analytical techniques characteristic of current social and geographical research. Includes defining a research problem, measurement, sampling, research design, analysis and writing the report. Fulfills the Formal Analysis requirement. A required skills course in the geography major, and strongly recommended for the GES major. Ms. Martin, Mr. Polsky/Offered every year

**GEOG152 GEOGRAPHY OF GLOBALIZATION/FIRST-YEAR SEMINAR**

How do we make sense of jobless growth in the United States, software outsourcing in India, sweatshops in China, and Wal-Mart in various parts of the world? As an introductory course for Economic Geography, in this class we examine spatial logics of the global economy, and analyze geographical variations of globalization. We analyze issues of development, income disparity across regions and nations, emergence of multinational corporations, and impacts of government policy on development to better understand where industries and firms develop, how they emerge, and why they decline. This class covers industrial location theories, theories of regional growth, and case studies of various global industries, businesses and entrepreneurship. Each student has an opportunity to write a research project focusing on one globally-produced commodity. Fulfills the Global Perspective requirement. Ms. Aoyama/First-Year Seminar

**GEOG179 GLOBAL ENVIRONMENTAL JUSTICE/ LECTURE, DISCUSSION, FIRST-YEAR SEMINAR (IN ALTERNATE YEARS)**

Integrates ecology and political economy from local to global scale through case studies. Starts from a view of people in environmental "hot spots," following links to world economy and planetary ecosystems. Explores connections of international environmental and economic policy with everyday realities and possible ecological futures of



people from the Amazon rain forest to the streets of Worcester. Offered as a first-year seminar (fulfills the Verbal Expression requirement) and as a lecture course alternate years. Ms. Rocheleau/Offered every other year

**GEOG180 THE EARTH TRANSFORMED BY HUMAN ACTION/LECTURE, DISCUSSION**

Traces the course of human modification and transformation of the earth since antiquity, but with particular emphasis on the last 300 years. The major causes and consequences of these changes are explored from global climate change to the sustainability of life. Verbal expression and nonverbal expression sections. Staff/Offered every year

**GEOG197 NATIVE AMERICANS AND NATURAL RESOURCES**

In June of 1975, a gunfight between the F.B.I. and the American Indian Movement (A.I.M.) occurred in South Dakota. The shoot-out was due, in part, to the transfer of Indian land to the U.S. government for uranium and coal development. Some of the most extensive reserves of uranium, coal, oil and gas, gold, copper, timber, water, and other resources lie within reservation boundaries and their development has been fiercely contested by many Native Americans. This course deals principally with the efforts of Native Americans to manage resources, to resist land and resource seizures by corporations and federal and state governments, and to repair damage done to ecological systems. We will examine the history of Native Americans; the appropriation of their lands; corporate natural resource development impacts; contested concepts of "development" and "progress"; and new approaches to resource management including salmon restoration, bup-falo management, and wolf reintroduction. These cases will be complemented with others from those places now called Australia, New Zealand, Canada and Ecuador to gain an understanding of how indigenous peoples deal with and resist resource development efforts on and near their lands. Periodically offered as a first-year seminar as GEOG090. Fulfills the Global Perspective requirement. Ms. Emel

**GEOG216 FIELD METHODS FOR ENVIRONMENTAL SCIENCE/LECTURE, LAB**

Central to scientific work in the environmental sciences is the collection and analysis of field data. In this field-based course students will learn central methods used in environmental science, especially forest ecology. Students will work with the scientific method and explore how to formulate and test hypotheses. Class meets once per week at Tower Hill Botanic Garden, where students will learn to collect and analyze field data. GEOG116 Forest Ecology is a prerequisite for GEOG216. Mr. Kulakowski/Offered every year

**GEOG222 WHY GLOBAL WARMING MATTERS II/SEMINAR**

Offers students the chance to examine the causes, consequences, responses and political debates associated with anthropogenic climate change (global warming). Prerequisite: GEOG022 or permission of instructor. Mr. Polsky/Offered periodically

**GEOG224 ECONOMY AND ENVIRONMENT/LECTURE, DISCUSSION**

Environmental problems are largely the result of economic developments and human settlement patterns. This course involves the examination of different types of economies, various institutional forms and constraints, and cultural features that have environmental implications. Of particular importance are the types of futures that people envision, and the sorts of economic features that must be developed to achieve desirable (or sustainable) futures. Ecological modernization, political and social ecologies, voluntary simplicity, industrial ecology,

small entrepreneurial economies, and other discourses/practices will be examined for their economic and environmental implications. Ms. Emel/Offered every other year

**GEOG226 WHO FEARS WHAT AND WHY: SOCIAL THEORIES OF ENVIRONMENTAL RISKS AND HAZARDS/SEMINAR, LECTURE, DISCUSSION**

Prerequisite: GEOG141 Research Methods in Geography, or equivalent, or permission of instructor. Introduces advanced undergraduate students and graduate students to the social study of environmental risks and hazards, environmental management and policy, and social impact analysis. Students will explore traditional theories and models underlying risk/hazard analysis, the current debates and research frontiers in the field, and some applied risk/hazard issues of societal concern. Course activities will help students develop the knowledge and writing, presenting and critical-reasoning skills necessary for evaluating environmental risks and hazards. Mr. Polsky/Offered periodically

**GEOG232 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION**

Considers the relationships between spatial patterns in landscape structure (physical, biological and cultural) and ecological processes. Role of ecosystem pattern in mass and energy transfers, disturbance regimes, species' persistence, applications of remote sensing and GIS for landscape characterization and modeling are examined. Mr. Rogan/Offered every year

**GEOG234 THE GEOGRAPHY OF FIRE/LECTURE, DISCUSSION**

Fire has always been, and will always be a "hot" topic. This course will be one of the first of its kind offered at a university to both undergraduate and graduate students. It examines relationships between wildfire from a physical, biological and cultural perspective. Topics include: the chemistry and physics of fire, fire behavior (including the influences of fuel and weather), the ecological effects of fire, the cultural and institutional framework of fire management, and the cultural nature of wildfire in society. Mr. Rogan/Offered every year

**GEOG237 FEMINISM, NATURE AND CULTURE/SEMINAR**

The purpose of this course is to expose students to major currents of contemporary social theory that have developed around "nature" and "woman" or nature and gender. We will explore a number of important contemporary topics including: biotechnology and "life," food and identity, the body/science/fashion, human and nonhuman animal relations, and the manner in which conceptualizations of nature and of women (or gender roles) mutually constitute and reinforce one another. Our principal goals are to analyze and critique the normative idea of what is "nature" or what is "natural" as it pertains to gender, environmental processes, other life forms, and human social and economic existence in general. Because feminists have been instrumental in leading much of this analysis and critique, we lean heavily on feminist theories. We will explore these ideas through science fiction, magical realism, cartoons, movies, other fiction, social histories and biographies. By the end of the semester, students should be adept at decoding representations of nature and gender in the popular media as well as in academic scholarship. Students should also have a reasonable understanding of the development of and debates surrounding biotechnology and gender, identity and gender, and ecofeminist thought. Ms. Emel/Offered every other year



**GEOG247 INTERMEDIATE QUANTITATIVE METHODS IN GEOGRAPHY/LECTURE, LABORATORY**

Continues development begun in GEOG110 of computer-based methods in geographical analysis. Focuses on bivariate and multivariate regression, discriminant analysis, factor analysis, log-linear models and analysis of spatial and temporal data. Includes lab work with PCs, spreadsheets and SPSS-X statistical software package. Prerequisite: GEOG110. Meets skill requirement for geography majors and graduate students. Mr. Ratick/Offered every year

**GEOG250 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT/SEMINAR**

A survey of analytic techniques used in evaluating environmental conditions and the impacts of technology. These techniques consist of formal methods such as cost-benefit, risk-benefit, cost effectiveness and decision analysis. They also include methods used to elicit human judgment and behavioral responses in evaluating complex environmental and technical systems. Draws on case studies and teaches students to make both quantitative and qualitative assessments. Mr. Ratick/Offered every year

**GEOG255 QUALITATIVE RESEARCH METHODS, SKILLS AND APPLICATIONS/LECTURE, DISCUSSION**

Examines the purpose, scope and procedures of qualitative research, especially as applied to human geography. Emphasis is on epistemologies underlying various approaches to qualitative research. Readings will draw on a variety of work in the social sciences, especially anthropology, geography, sociology and women's studies. We examine a range of qualitative methods, including interviews, participant and nonparticipant observation, ethnography, action research and discourse analysis. Through case-study readings, we examine how scholars employ these methods in different research contexts, with particular attention to the ethical and practical considerations of doing so. The course will engage theoretical debates relevant to qualitative research by addressing questions such as: How does qualitative research challenge the practice of social "science" and the search for "universal truths"? How do we represent the world or multiple understandings and perspectives of it? What are the implications of using qualitative data for the researcher, the research product and the "researched"? How do we interpret qualitative data and present it to scholarly audiences? Ms. Rocheleau, Ms. Martin/Offered every other year

**GEOG256 GLOBAL ECONOMIC GEOGRAPHIES/SEMINAR**

Explores dynamics of economic interdependence across regions and nations through analyzing the process of globalization. Focuses on the geographic characteristics of global production (multinational corporations, outsourcing), international trade (logistics, retail), financial flows (global cities) and technological innovation (the Internet). Ms. Aoyama/Offered every other year

**GEOG257 INTERNET GEOGRAPHY: SOCIOECONOMIC IMPACTS OF INFORMATION TECHNOLOGIES/LECTURE, DISCUSSION**

Examines how the Internet has changed our society, economy, culture and geography. Explores the myths and the realities of the impacts derived from technological changes. Issues for discussions include an examination of 'the death of distance', social polarization and the 'digital divide' at the national and international scales, as well as the changing practices and modes of everyday social interactions. Explores how consumption and our conceptualization of leisure is changing as a result of the widespread use of the Internet. Ms. Aoyama/Offered every other year

**GEOG258 UTOPIAN VISIONS, URBAN REALITIES: PLANNING CITIES FOR THE 21ST CENTURY/LECTURE, DISCUSSION**

Although utopia literally means "no place" and utopias do not exist in any concrete sense, utopian thinking exerts a powerful hold on our imagination and continues to inspire a lot of approaches to urban policy, design and planning today. This course explores this thinking and will attempt to come to grips with various ideas about what utopias should be, how they have animated our thinking about city form and function, and how they have achieved certain material expressions in the twentieth-century urban context. It will also examine the contradictions and unintended consequences of utopian thinking in planning. Amongst other things, the course will grapple with questions of order versus disorder in the city, heterogeneity versus homogeneity, openness versus closure, and individual freedom versus collective necessity. It will draw upon geographical sources as well as a diverse array of other materials. Ms. Martin/Offered every other year

**GEOG260 QUANTITATIVE MODELING/LECTURE DISCUSSION**

Quantitative Modeling/Lecture Discussion Investigates the quantitative and qualitative potential of using mathematical computer models to guide policy in human/environment systems. Students learn to think with a systems perspective while translating their own conceptual models to mathematical models to computer models. Includes lab sessions in the computer room and lectures/discussion in the classroom. Culminates in written and verbal presentations of student projects. Students will gain technical proficiency in Excel and the Visual Basic for Applications (VBA) programming language. Prerequisites are GEOG110/311 Intro to Quantitative Methods or graduate standing or permission. Mr. Pontius/Offered every year

**GEOG262 URBAN ECONOMIC GEOGRAPHY/ SEMINAR**

The past two decades have been a period of particular vitality in development of theory, new perspectives, and alternative discourse about the city and the contemporary urban experience. This course examines recent developments in urban geography and details a political economy of urbanization in advanced capitalist societies. Staff/Offered every other year

**GEOG263 THE CLIMATE SYSTEM AND GLOBAL ENVIRONMENTAL CHANGE/LECTURE, DISCUSSION**

An in-depth look at the global ecosystem and the science of global environmental change. We will deal with the lithosphere, atmosphere, hydrosphere and ecosphere; the linkages between these elements of the earth system; biogeochemical cycling and human perturbation of these cycles; human-induced changes in atmospheric chemistry and surface processes; climate variability over geologic time; and projections of future change. The goal of the course is to provide the scientific background that is necessary for understanding problems of global change and addressing issues of impacts and the many related social and policy questions. Ms. Frey/Offered every year

**GEOG271 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION**

Introduces geological and hydrological factors controlling the occurrence and development of groundwater, and the methods and impacts of groundwater management. Ms. Emel/Offered periodically

**GEOG274 AFRICA'S DEVELOPMENT IN GLOBAL CONTEXT**

Explores, in detail, the economic geographies of Sub-Saharan Africa; both their historical development and their contemporary manifestations in commodity chains, business practices, production systems, gender and environmental relations, entrepreneurial and innovative

behavior, and rural and urban livelihood strategies. Emphasis is placed on examining how African economies relate to the rest of the world, how globalization is influencing the prospects for growth, autonomy, and sustainability in Africa, and how Africans actually produce, innovate, succeed, and struggle in their business activities. Confronts stereotypes about “backward” economic practices in Africa and encourages students to view Africans as capable agents of economic change not simply as passive victims of global or historical inequalities. Mr. Murphy/Offered every other year

**GEOG277 GENDER, ENVIRONMENT AND DEVELOPMENT/SEMINAR**

Considers gendered identities, affinities, control, responsibility, knowledge, labor and benefits in the definition, use, management and protection of environments. Readings, lectures and discussion focus on the distinct perspectives and concerns of women and men as actors in natural resource use and management, and in local, regional and global ecological transformations linked to economic restructuring. Ms. Rocheleau/Offered every year

**GEOG280 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION**

Explores ecology and the social and physical geography of cities as systems built, inhabited and managed by people. This class of ecosystem is often neglected except in studies of pollution, yet it is home to many of the world's people and to a surprising number of plant and animal species as well. Readings, lectures, discussion and written work combine landscape and systems ecology with physical and urban geography and environmental justice to broaden our understanding of city environments, both present and possible. Ms. Rocheleau/Offered every year

**GEOG281 TROPICAL ECOLOGY/LECTURE, DISCUSSION**

Examines structure and function of several major tropical ecosystems (rain forests, savannas, wetlands, coastal zones, deserts) from the perspective of systems ecology and resilience, then applies these concepts to analysis of problems in land use. Readings, lectures and discussions focus on energy flows, material cycles, and species diversity and distribution. Explores pattern and process in tropical ecosystems (especially forests and savannas) under conditions of widespread change in species composition, landscape and livelihoods in tropical and subtropical terrestrial environments. Ms. Rocheleau/Offered every other year

**GEOG282 ADVANCED REMOTE SENSING/LECTURE, LABORATORY**

Application of remote sensor systems in earth science and other disciplines; interpretation of multispectral scanner, RADAR and thermal imagery, classification, postclassification analysis, special transformations, multitemporal data analysis for change detection, the study of spectral characteristics of vegetation, soils, water, minerals and other materials. The specific objectives of the course are to acquaint the student with the physical principles underlying remote sensing systems and the primary remote-sensing data-collection systems; introduce the student to methods of interpreting and analyzing remotely sensed data; provide some insight concerning the applications of remote sensing in various discipline areas; and provide hands-on experience in digital image processing using software packages available in the computer lab. Mr. Rogan/Offered every year

**GEOG289 DEVELOPMENT POLICY/SEMINAR**

A research seminar for students with some background in development studies. After an introduction on policy and policy-making institutions, the seminar critically examines recent tendencies in development policy, particularly the policies advocated by the World Bank, IMF and WTO. The course also looks at alternative development. Mr. Peet, Staff/Offered every year

**GEOG314 RESEARCH PROPOSAL WRITING IN GEOGRAPHY/GRADUATE SEMINAR**

Covers major topics in empirical social science research design, including problem definition, research strategies, sampling, data-collection techniques and proposal writing. Mr. Polsky/Offered every year

**GEOG315 PROFESSIONAL TRAINING FOR GEOGRAPHERS**

Examines graduate studies and career needs, including grant preparation, teaching skills/techniques, job interviewing, as well as introducing the faculty of the School to the student body. A noncredit, required course for first year Ph.D. students in geography. Mr. Polsky/Offered every semester

**GEOG318 EXPLANATION IN GEOGRAPHY/SEMINAR**

This seminar explores the main types of explanation in geography and other social sciences, including positivist, existentialist, realist, Marxist, feminist and postmodernist approaches. The seminar focuses on tensions between structural and nonstructural explanation and the integration of theory with empirical facts. Meets first-year core course requirement for geography graduate students. Mr. Peet/Offered every year

**GEOG343 SEMINAR IN HUMAN DIMENSIONS OF GLOBAL CHANGE: IMPACTS AND SOCIETAL RESPONSES/GRADUATE SEMINAR**

This seminar is designed to introduce graduate students to the concepts and methods associated with scholarly research on global change vulnerability. This emerging literature derives from decades of research on human-environment interactions, and presumes that there is a reciprocal relationship between people and their physical environments. In particular, vulnerability is conceived of as a function of exposure to specific stresses, sensitivity to the exposures, and associated adaptive capacities. We will examine each of these dimensions using both theoretical texts and applied case studies. We will also critically evaluate what is new about “vulnerability” research—and what is not so new. Mr. Polsky/Offered periodically

**GEOG344 SPECIAL TOPICS IN ENVIRONMENT AND DEVELOPMENT/SEMINAR**

Addresses specific topics relevant to critical and practical studies of environment and development. The course will operate on a seminar format with scope to accommodate reading groups on specific themes within the class. The topics will include, but will not be limited to the following: complexity theory, network theory and models; women's movements and environment and women in environmental movements; environmental dimensions of the World Social Forum and related movements; the commons and common property in local and global forestry; indigenous knowledge, environment and local/global science; international case studies of sustainable development alternatives; regionally focused studies of environment and development in selected regions within Africa, Caribbean, Central and South America. Ms. Rocheleau/Offered every year

**GEOG345 QUANTITATIVE REVOLUTION: EXAMINATION OF BENEFITS AND LIMITATIONS OF STATISTICAL ANALYSIS FOR HUMAN GEOGRAPHY RESEARCH/GRADUATE SEMINAR**

Students will investigate the consequences of specifying regression models that violate assumptions, and the range of alternative specifications that permit insight into the ways in which both large- and small-scale factors influence and are influenced by social and natural processes. Mr. Polsky/Offered periodically



**GEOG349 ADVANCED TOPICS IN SPATIAL ANALYSIS/SEMINAR**

Explores spatial statistics and spatial decision models. The spatial statistics part of the course focuses on point, block and global estimation, fitting variogram models, kriging and spatial simulation. The prescriptive modeling part will focus on location/allocation-based decisions models including private- and public-sector facility location problems and land-allocation models. The topics covered are closely linked to the underlying spatial analytic methodologies used in, and often illuminated by examples developed with, Geographic Information Systems (GIS). The spatial statistics module in the IDRISI GIS will be used. The class is run on the "Socratic" method with some high-tech twists. Students are assigned a topic per week to prepare material and lead discussion. Pass/fail. Grading is based on class participation. Mr. Ratick/Offered every year

**GEOG351 SEMINAR IN RESOURCE GEOGRAPHY: THEORY AND METHOD/SEMINAR**

Examines theories and methods of resource estimation, allocation and management, providing coverage of the scholarly literature of the field. Ms. Emel/Offered every other year

**GEOG353 INTERNATIONAL POLITICAL ECOLOGY/ LECTURE, DISCUSSION**

Integrates theory and practice from cultural ecology, political economy and ecological science, from local to global scale, based on readings and papers in social theory (feminist, structuralist, poststructuralist), policy, social/environmental movements, ecological paradigms, environmental management, sustainable development and conservation. Reading, writing and discussion combines theory and case studies ranging from rural, agrarian cases to urban, industrial contexts. There is no prerequisite for Geography PhD students. For MA students, there is a prerequisite of a prior development theory course such as GEOG388 Development Policy, IDCE354, IDCE 360, or permission of the instructor. For purposes of Fall 2007 registration you may contact Professor Rocheleau by email: drocheleau@clarku.edu. Ms. Rocheleau/Offered every other year

**GEOG355 SOCIAL FORESTRY, AGROECOCLOGY AND DEVELOPMENT/SEMINAR**

Considers importance of trees and forests, as well as sustainable farming practice, to social and ecological well-being of people, emphasizing interests of rural people in Africa, Asia and Latin America. Examines forest and agricultural resources as a growing focus of political and economic action at local, national and international levels. Concentrates on case-study examples of technical and policy innovations in social forestry and agroforestry. Ms. Rocheleau/Offered periodically

**GEOG362 SEMINAR ON GLOBALIZATION**

Examines contemporary literature on globalization from various disciplinary perspectives. Both theoretical and empirical literature from Economics, Geography, Sociology, Political Science and Anthropology on various aspects of globalization, including governance, interdependence, labor relations and 'networks' will be analyzed. Explores the possibilities of developing a geographic paradigm to better understand the relationship between the global and the local. Ms. Aoyama/Offered every other year

**GEOG364 GRADUATE SEMINAR IN ECONOMIC GEOGRAPHY PART I: ORIGINS AND CLASSICS/SEMINAR**

Reviews historical debates and classical readings in economic geography. Includes conceptual frameworks and main assumptions of a variety of pertinent theories including industrial location, agglomerations, theory of the firm, institutions, trade, and theory of the state. Ms. Aoyama/Mr. Murphy/Offered every other year.

**GEOG365 GRADUATE SEMINAR IN ECONOMIC GEOGRAPHY PART II: FUNDAMENTALS AND CURRENT DEBATES/SEMINAR**

Reviews contemporary debates in economic geography. Includes conceptual frameworks and main assumptions of a variety of pertinent theories, with an emphasis on contemporary readings of industrial location, agglomerations, theory of the firm, institutions, trade, and theory of the state. Ms. Aoyama/Mr. Murphy/Offered every other year

**GEOG368 THE DEVELOPMENT OF WESTERN GEOGRAPHIC THOUGHT/ SEMINAR, DISCUSSION**

Examines principal orientations, themes and debates within emergent professional geography communities in the 19th and 20th centuries and the professional structure of the field in research, educational and applied contexts. Primarily for graduate students entering geography. Staff/Offered every year

**GEOG373 SEMINAR IN URBAN GEOGRAPHY**

In this seminar we will consider fundamental geographical aspects of urban theory. Some years this course is offered as the first installment of a two-sequence course with Geog 374. In that year-long sequence, we start in the fall with a survey of major theoretical perspectives ranging from neoclassical economics to political economy perspectives. Other years, this course will stand alone. In both, the goal is to understand the ways that scholars have approached the study of cities, and to compare and contrast the epistemological assumptions underlying different approaches to "the urban." We will critically evaluate major theoretical perspectives in light of their contribution to contemporary research: ecological theories, neoclassical theories, institutional theories, political economy approaches, and cultural studies/identity approaches. Ms. Martin/Offered every other year

**GEOG374 SEMINAR IN URBAN GEOGRAPHY, PART II**

In this seminar we will consider fundamental geographical aspects of urban theory as part of a year-long sequence. Following from GEOG 373, we will survey major theoretical perspectives focusing on political economy and postmodern and poststructural perspectives. This course places special emphasis on understanding approaches to "difference", especially class, race/ethnicity, and gender. The course goal is to understand the ways that scholars have approached the study of cities, and to compare and contrast the epistemological assumptions underlying different approaches to "the urban." We will critically evaluate major theoretical perspectives in light of their contribution to contemporary research. Ms. Martin/Offered every other year or as Geog 373.

**GEOG375 TECHNOLOGY AND SUSTAINABILITY: PERSPECTIVES FROM THE GLOBAL SOUTH/SEMINAR**

Examines the nature of technologies and their relationships to socioeconomic and environmental change in the developing world. Readings and discussions will address and critique theories on technology change, the role of technologies in development, and their real-world implications (good and bad) for developing regions. Theoretical literature will be linked to empirical case studies of agricultural, energy, financing, information-communication, and/or manufacturing technologies in Sub-Saharan Africa, Latin America, and South/Southeast Asia. The key objective of the course is to deepen and complicate students' understandings of the ways in which technologies are developed, diffused, and absorbed and about how these processes influence communities and economies in the Global South. Mr. Murphy/Offered every other year

**GEOG378 CONTROVERSIES IN EARTH SYSTEM SCIENCE / SEMINAR**

This graduate-level seminar examines emerging issues and current controversies in Earth System Science. Some of the most contentious issues in the Earth Sciences are inherently interdisciplinary and involve significant interactions between land, atmosphere, ocean, ice, and humans. Specific topics discussed in this seminar include abrupt climate change, biogeochemical cycling, biocomplexity, oscillatory climate phenomena, trace gas exchange, ice sheet dynamics, paleoclimate, extreme weather events, and human-induced environmental change. This seminar not only introduces students to recent, cutting-edge research, but given the controversial nature of these issues also gives students insight into the process of critically evaluating Earth System Science studies. Ms. Frey/Offered every year

**GEOG385 SPATIAL DATABASE DEVELOPMENT**

Examines the procedures and technologies used for spatial database development in support of Geographic Information Systems (GIS). Topics covered include sustainable database design, database import/export/update programming, advanced vector analysis, internet mapping trends and GIS-related business process modeling. Staff/Offered every year

**GEOG390 RASTER GIS/LECTURE, LABORATORY**

Introduces GIS as a data management, analysis and mapping tool. Topics include GIS data structure and management, geodesy and map projections, techniques for raster and spatial database Development. Laboratory exercises concentrate on applying concepts presented in lectures using IDRISI software. While students gain a working knowledge of software application, the focus of the course is on analytical concepts that are fundamental for any spatial analysis using any GIS software. Although the course is computer oriented, no programming is involved. Graduate students may receive credit for this course. A formal-analysis course. Counts as skills course or core course in mapping sciences/spatial analysis in geography major. Staff/Offered every semester

**GEOG397 ADVANCED TOPICS IN GIS/LECTURE, LABORATORY**

Covers major research and application issues in Geographic Information Science. Topics include exploratory spatial data analysis, spatial statistics, land-change modeling, change and time-series analysis, error assessment analysis under conditions of uncertainty, spatial interpolation, and multi-criteria and multi-objective decision making. Concepts introduced during lectures are illustrated in class demos using IDRISI Andes, ArcGIS Desktop and GeoDa software. Final project is required for the completion of this course. Prerequisite: GEOG390/IDCE310 Raster GIS and GEOG306/IDCE388 Vector GIS, or permission of instructor. Ms. Ogneva-Himmelberger/Offered every year

**IDCE30212 INTRODUCTION TO QUANTITATIVE METHODS /LECTURE, LABORATORY**

See International Development and Social Change 110.

**IDCE363 DECISION METHODS FOR ENVIRONMENTAL MANAGEMENT AND POLICY/ LECTURE, DISCUSSION**

See Environmental Science 261.

**IDCE371 INTRODUCTION TO REMOTE SENSING /LECTURE, LABORATORY**

See International Development and Social Change 293.

**IDCE392 GIS & LAND CHANGE SCIENCE**

See Environmental Science 235.

**UDSC296 VECTOR GIS/LECTURE, LABORATORY**

See International Development and Social Change 296.

**GLOBAL ENVIRONMENTAL STUDIES****Program Faculty**

David Angel, Ph.D.  
J. Ronald Eastman, Ph.D.  
Jody Emel, Ph.D.  
Karen Frey, Ph.D.  
Douglas Johnson, Ph.D.  
Dominik Kulakowski, Ph.D.  
Deborah Martin, Ph.D.  
James T. Murphy, Ph.D.  
Richard Peet, Ph.D.  
Colin Polsky, Ph.D.  
Robert Gilmore Pontius Jr, Ph.D.  
Samuel Ratick, Ph.D.  
Dianne Rocheleau, Ph.D.  
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**Adjunct Faculty**

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Sarah Buie, M.F.A.  
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Timothy Downs, D.Env.  
William Fisher, Ph.D.  
Jacqueline Geoghegan, Ph.D.  
Robert Goble, Ph.D.  
Todd Livdahl, Ph.D.  
Bruce London, Ph.D.  
Paul W. Posner, Ph.D.  
Jennie Stephens, Ph.D.

**Affiliate Faculty**

Susan Hanson, Ph.D.  
Roger Kasperson, Ph.D.  
Robert Kates, Ph.D.  
Billie L. Turner, Ph.D.

**Emeriti Faculty**

Robert Mitchell, Ph.D.

**Off-Campus Affiliated Faculty**

Scott Jiusto, Ph.D - Worcester Polytechnic Institute  
Rob Krueger, Ph.D - Worcester Polytechnic Institute

**Program Overview**

Citizens of the world in the 21st century must deal with notoriously difficult environmental questions. How do we reduce our dependency upon fossil fuels? How can we reverse biodiversity decline? Is biotechnology safe for humans and other species? Can we achieve more economic justice and protect the environment at the same time? Will international institutions and social movements lead the way or will local environmental justice groups provide the real solutions?

Through an interdisciplinary approach the global environmental studies major provides students with the knowledge and tools to understand the economic, political and cultural causes of environmental transformation, degradation and exploitation. More importantly, the major affords students opportunities, through research, internships and field work, to consider and develop solutions to environmental



problems. Students will look at global and local environment issues through the eyes of people whose lives, livelihoods and ways of living are at stake in the process of economic, ecological, cultural and political change. Students will contend with the economic practices, laws and policies, cultural values and social norms that guide use of the environment in multiple locations with different climates, histories, economies and governing regimes. Students will learn the histories, geographies and strategies of major social movements which have fought for environmental protection, cultural survival, biodiversity, food security, common property and equitable distribution of resources.

The international community needs professionals with a breadth of understanding of today's complex reality. Students with an understanding of international political economy, global environmental change, environmental information systems, environmental law and policy, geographic information systems, gender and environment, and social theory will be able to go into media, finance, law, advocacy, government, civil-society organizations or corporations with the knowledge and skills necessary for shaping sustainable livelihoods.

For details regarding the major or minor, students should consult the Guide to the Major/Minor, which is available on our Web site at <http://www.clarku.edu/departments/ges/>.

## Undergraduate Requirements

The Global Environmental Studies major provides a general introduction into the interdisciplinary field, and offers the opportunity to study a particular dimension in depth. The major has four components: (1) Breadth courses; (2) Skills Courses; (3) Depth Courses; and (4) a Capstone seminar or internship. GES majors are required to take a minimum of 12 interdepartmental courses in accordance with the following guidelines:

### Breadth Requirement

**(Five courses)** Environmental problems and solutions result from economic systems, governments, international institutions, cultural systems, social movements and ecological systems. Breadth courses emphasize the basic concepts of the Global Environmental Studies Major and ways of creating knowledge. Courses in the breadth area are designed to help you build frameworks for understanding the world. We strongly encourage you to take your breadth courses *early* in your program, because these courses are often prerequisites for 200-level courses. Majors must take 5 breadth courses which are selected from the following broad disciplinary areas. Students must take **one** course from *State of the Earth* and **one** course from *Natural Science*. The remaining **three** courses can be chosen from the four remaining areas: *Economics/Political Economy of the Environment*; *Government/Institutions*; *Civil Society and Social Movements*; and *Culture and Environment*.

### Skills Requirement

**(Two Courses)** Skills are particularly important to promoting valid analysis of environmental problems and their solutions. They are of critical importance in gaining employment after graduation. Majors must take two skills courses and are encouraged to take more. GES 141 (Research Design) is strongly recommended for all GES majors unless the student obtains permission from the advisor. Exceptions may be granted on a case-by-case basis, especially for those students who take a humanities-based approach to the major. The second required course should be intellectually compatible with the "depth" area.

### Depth Requirement

**(Four Courses)** Depth courses give you an opportunity to explore a specific subject area more critically and stringently. The field of global environmental studies is large, and students should develop expertise in a more narrowly defined substantive area. Majors are required to take four depth courses, two of which must be at a 200-level. The depth or substantive area is determined by the student and advisor through development of the learning plan (see below). Some examples are *Sustainability Science*; *Culture and Political Ecology*; *Urban Industrial Ecology and Urban Environmental Problems*; *Environmental Risks and Hazards*; *Resource Management*; *Land-Change and Land-Degradation Science*; *Art and the Environment*; and *Energy and the Environment*.

### Capstone

**(One Course)** The capstone is intended to draw together the knowledge and skills gained throughout the course of study for completing the requirements of the major. Each year a series of capstone courses is offered. The chosen capstone should complement the work completed previously by the student and be in accordance with the student's formal learning plan. Internships and special research opportunities are also encouraged and count as capstone experiences.

### Learning Plan and Learning Synopsis

Each student is required to prepare a formal learning plan upon declaring the major. This plan, which can take the form of the major planning sheet in the program guide, identifies the courses the student intends to take (and in which semesters) in order to complete the major requirements. This plan can and should be regularly updated, with files retained by the major advisor and/or the undergraduate coordinator, as well as by the student.

In addition by January 31 of the senior year, each student must complete a *learning synopsis*. The synopsis will provide a comprehensive assessment of the GES major as experienced by the student. Specifically, the synopsis describes and points to evidence of student achievement according to the goals of the major: 1) understanding the diverse sources, and therefore, possible solutions to environmental problems; 2) articulating relationships of people, culture, and society with the biophysical environment; 3) defining and describing concepts of sustainability, economic and social justice in a global context 4) identifying specific problem/issue of global environmental significance and discussing comprehensive approach to solutions; and 5) mastery of appropriate skills. The synopsis must be developed in consultation with, and signed by, two GES faculty.

### Internships and Study Abroad

Students are strongly encouraged to do internships with local, state, federal and international governments, and social movement organizations for major credit. Similarly, study abroad provides students the opportunity to witness first-hand the environmental issues that arise in other parts of the world and to be a part of their analysis and solution. To receive credit for study abroad, students must work with faculty advisers or other departmental and affiliate professors.

### Requirements for the Dual Major

In accordance with university guidelines, the requirements for a dual major are identical to those of the individual major. Two courses may be double-counted towards both majors. Students may not, at this time, double major in global environmental studies and geography.

## **Course Layout:**

### ***I. Breadth Requirement (Total of five courses)***

#### **A. State of the Earth (One course required)**

- EN171 International Perspectives on Environmental Problems and Policies
- GES179 Global Environmental Justice
- GES180 The Earth Transformed by Human Action

#### **B. Natural Science (One course required)**

- BIOL084 Biodiversity
- BIOL103 Principles of Environmental and Conservation Biology
- BIOL114 Marine Biology
- BIOL201 Ecology of Atlantic Shores
- BIOL216 Ecology
- CHEM142 Environmental Chemistry
- EN120 Discovering Environmental Science
- GEOG035 The Natural Environment of New England
- GEOG101 Introduction to Environmental Geology
- GES102 Weather & Climate
- GES114 Introduction to Geomorphology
- GES115 Introduction to Hydrology
- GES232 Landscape Ecology
- GES263 The Climate System and Global Environmental Change

#### **C. Economics/Political Economy of the Environment**

##### **(Choose one of the following courses:)**

- ECON 157 Economics of Natural Resources and Environment
- GES126 Living in the Material World: Political Geography of Resource Development.
- GES127 Political Economy of Development
- GES224 Economy and Environment
- ID125 Tales from the Far Side: Development and Underdevelopment

#### **D. Government/Institutions**

##### **(Choose one of the following courses:)**

- EN171 International Perspectives on Environmental Problems and Policies
- EN276 Environmental Law
- GOVT157 The Politics of U.S Environmental Issues
- GOVT216 Comparative Environmental Politics
- ID294 Participation and Environmental Management

#### **E. Civil Society and Social Movements**

##### **(Choose one of the following courses:)**

- GES090/197 Native Americans and Natural Resources
- GOVT251 U.S Social Movements and Interest Groups
- ID131 Local Action/Global Change
- ID253 Social Movements, Globalization and the State
- ID294 Participation and Environmental Management
- SOC265 Social Movements: Quest for Justice

## **F. Culture and Environment**

### **(Choose one of the following courses:)**

- ARTS162 Exploring of the Natural World: Seeding Artistic Process with Drawing Monotype and Mixed Media
- ARTS 204 Sacred Space
- GES017 Culture, Place and Environment
- GES136 Gender and Environment
- GES237 Feminism, Nature and Culture
- ID269 Raced Nature, Gendered Developments: The Political Economy of Environmental Conservation
- PHIL131 Environmental Ethics
- PHIL232 Case Studies in Environmental Ethics

### ***II. Depth Component (Students must take four courses in a substantive area, two of which must be at the 200 level.***

#### ***Examples follow.)***

#### **A. Sustainability Science**

- ECON128 Introduction to Economic Development
- EN 101 Sustainability Science: Environment, Society and Technology
- EN 277 Sustainable Consumption and Production
- GES226 Who Fears Environmental Risk and Why: Social Theories of Environmental Risks and Hazards
- GES275 Technology and Sustainability: Perspectives from the Global South
- ID112 Leading Issues and Sustainable Development

#### **B. Culture and Political Ecology**

- ECON245 The History of Global Economy
- GES 017 Culture, Place and Environment
- GES105 Keeping of Animals: Patterns of Use and Abuse
- GES136 Gender and Environment
- GES179 Global Environmental Justice
- SOC205 Sociology of the Environment

#### **C. Urban-Industrial Ecology and Urban Environmental Problems**

- GEOG250 Technology and Environmental Assessment
- GEOG256 Global Economic Geographies
- GES125 Suburban Sprawl under the Microscope
- GES280 Urban Ecology: Cities as Ecosystems
- MGMT252 Corporate Environmental Management
- D. Environmental Risks and Hazards
- GEOG222 Why Global Warming Matters II
- GEOG247 Quantitative Methods in Geography
- GESOG250 Technology and Environmental Assessment
- GES125 Suburban Sprawl under the Microscope
- GES226 Who Fears Environmental Risks and Why: Social Theories of Environmental Risks and Hazards
- EN282 Management of Environmental Pollutants
- EN261 Decision Methods for Environmental Management and Policy

#### **E. Resource Management**

- ECON257 Environmental and Natural Resource Economics
- GEOG271 Groundwater Hydrology and Management
- GES105 Keeping of Animals: Patterns of Use and Abuse
- GES115 Introduction to Hydrology and Water Resources: A Geographical View
- GES126 Living in the Material World: The Political Geography of Resource Development
- PHYS140 Energy and the Environment



#### **F. Land-Change and Land-Degradation Science**

GES232 Landscape Ecology  
GES234 Geography of Fire  
ID296 Vector GIS  
IDND299 HERO

#### **G. Art and the Environment**

ARTS162 Exploring of the Natural World: Seeding Artistic Process  
with Drawing Monotype and Mixed Media  
ARTS 204 Sacred Space  
GES017 Culture, Place and Environment  
GES237 Feminism, Nature and Culture  
PHIL131 Environmental Ethics

#### **H. Energy and the Environment**

EN103 Sustainable University  
EN207 Climate Change, Energy and Development  
EN124 Global Warming: How to Respond?  
GES126 Living in the Material World: The Political Geography of  
Resource Development  
GES222 Why Global Warming Matters II

#### **III. Skills (Two required, one related to substantive specialization; Geog141 Strongly Recommended)**

ARTS120 Introduction to Photography  
ARTS121 Intermediate Photography  
ARTS200 Photography Projects  
BIO106 Quantitative Methods in Biology  
ENG202 Feature Writing  
GEOG 216 Field methods for Environmental Science  
GES087 Introduction to Environmental Information Systems  
GES110 Introduction to Quantitative Methods in Geography  
GES141 Research Design and Methods in Geography  
GES261 Decision Methods for Environmental Management and  
Policy  
GES226 Who Fears Environmental Risk and Why: Social Theories  
of Environmental Risks and Hazards  
ID190 Raster GIS  
ID260 Quantitative Modeling  
TA107 Introduction to Video Production  
TA119 Public Speaking

#### **IV. Capstone**

GES222 Why Global Warming Matters II  
GES224 Economy and Environment  
GES226 Who Fears Environmental Risk and Why: Social Theories  
of Environmental Risks and Hazards  
GES280 Urban Ecology: Cities as Ecosystems  
SOC276 Environment and Inequality  
IDND299 HERO  
Internship

#### **Honors Program**

The honors program in geography provides qualified students majoring in geography and global environmental studies an opportunity to conduct a major independent research project on a topic of interest.

#### **Program Requirements**

- Complete a two-semester independent honors project (thesis) or counterpart in accepted "selective" program, such as HERO, the final product of which is evaluated by a Honors Committee.
- Present a poster or paper related to the honors project at Academic Spree Day or at a relevant professional meeting.
- Project must be supervised by a geography faculty member and one additional faculty member; the two members constitute the student's Honors Committee.

#### **Program Candidate Qualifications**

- Open to juniors with a minimum GPA of 3.25 overall and 3.5 GPA in the GES major by the end of first semester of the junior year of study, and who demonstrate the appropriate research background to undertake independent geographic research.
- Honors participants should have taken GES141 Research Methods, or its equivalent, before entering the program.

#### **Applying for Honors**

- Notification of eligibility and information about the program is forwarded to all junior students in November of the junior year.
- Students wishing to start their honors project in the spring semester of the junior year must notify the undergraduate program assistant by December 15. Those students wishing to start their honors project in the fall semester of their senior year must notify the undergraduate program assistant by March 15.
- Acceptance to the Honors Program is considered provisional until grades for the fall semester (junior year) are received. If these grades enable the student to continue meeting the GPA standards described above, she/he becomes formally accepted to the program.
- Honors students register for GES297 Directed Research (Honors), or HERO for two semesters -spring/fall of the junior-senior year or fall/spring of the senior year.

Details of the honors program in geography are available in the Undergraduate section of The School of Geography's Web page.

#### **Global Environmental Studies Minor**

Students wishing to minor in GES must complete a total of eight courses. They are the following components of the regular program major:

##### **Breadth Courses**

Same as the major students seeking a GES minor are required to take **5 breadth courses** which are selected from the broad disciplinary areas –listed above. Students are required to take **one** course from *State of the Earth* and **one** course from *Natural Science*. The remaining **three** courses can be chosen from the four remaining areas: *Economics/Political Economy of the Environment*; *Government/Institutions*; *Civil Society and Social Movements*; *Culture and Environment*.

##### **Depth Courses**

Must take 2 depth courses, one being at the 200 level

##### **Skills Course**

One skills course is required; GES141 is recommended.

## Courses

### **ARTS121 INTERMEDIATE PHOTOGRAPHY/STUDIO, LECTURE, DISCUSSION**

See Studio Art 121.

### **ARTS204 SACRED SPACE/LECTURE, DISCUSSION, PROJECTS**

See Studio Art 204.

### **BIOL201 ECOLOGY OF ATLANTIC SHORES/LECTURE, FIELD TRIP**

See Biology 201.

### **BIOL216 ECOLOGY/LECTURE, LABORATORY**

See Biology 216.

### **CHEM142 ENVIRONMENTAL CHEMISTRY/LECTURE, LABORATORY**

See Chemistry 142.

### **ECON128 INTRO TO ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION**

See Economics 128.

### **ECON157 THE ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT/LECTURE**

See Economics 157.

### **ECON245 THE HISTORY OF GLOBAL ECONOMY/LECTURE, DISCUSSION**

See Economics 245.

### **ECON257 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS/LECTURE, DISCUSSION**

See Economics 257.

### **EN101 SUSTAINABILITY SCIENCE: ENVIRONMENT, SOCIETY AND TECHNOLOGY**

See Environmental Science 101.

### **EN103 THE SUSTAINABLE UNIVERSITY**

See Environmental Science 103.

### **EN207 CLIMATE CHANGE, ENERGY AND DEVELOPMENT**

See Environmental Science 207.

### **EN261 DECISION METHODS FOR ENVIRONMENTAL MANAGEMENT AND POLICY/ LECTURE, DISCUSSION**

See Environmental Science 261.

### **EN276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION**

See Government and International Relations 276.

### **EN277 SUSTAINABLE CONSUMPTION AND PRODUCTION**

See Environmental Science 277.

### **GEOG222 WHY GLOBAL WARMING MATTERS II/ SEMINAR**

See Geography 222.

### **GEOG234 THE GEOGRAPHY OF FIRE/LECTURE, DISCUSSION**

See Geography 234.

### **GEOG250 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT/SEMINAR**

See Geography 250.

### **GEOG256 GLOBAL ECONOMIC GEOGRAPHIES/SEMINAR**

See Geography 256.

### **GEOG271 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION**

See Geography 271.

### **GEOG277 GENDER, ENVIRONMENT AND DEVELOPMENT/SEMINAR**

See Geography 277.

### **GEOG375 TECHNOLOGY AND SUSTAINABILITY: PERSPECTIVES FROM THE GLOBAL SOUTH/SEMINAR**

See Geography 375.

### **GES017 CULTURE, PLACE AND THE ENVIRONMENT/ LECTURE**

See Geography 017.

### **GES087 INTRODUCTION TO ENVIRONMENTAL INFORMATION SYSTEMS/LECTURE, LABORATORY**

See Geography 087.

### **GES090 NATIVE AMERICANS AND NATURAL RESOURCES**

See Geography 197.

### **GES102 WEATHER AND CLIMATE/LECTURE, LABORATORY**

See Geography 102.

### **GES105 KEEPING OF ANIMALS: PATTERNS OF USE AND ABUSE/LECTURE, DISCUSSION**

See Geography 105.

### **GES110 INTRODUCTION TO QUANTITATIVE METHODS /LECTURE, LABORATORY**

See International Development and Social Change 110.

### **GES114 INTRODUCTION TO GEOMORPHOLOGY/LECTURE**

See Geography 114.

### **GES115 INTRODUCTION TO HYDROLOGY/LECTURE, DISCUSSION**

See Geography 115.

### **GES119 ARCTIC SYSTEM SCIENCE / LECTURE, DISCUSSION**

See Geography 119.

### **GES120 DISCOVERING ENVIRONMENTAL SCIENCE/ LECTURE, DISCUSSION**

See Environmental Science 120.

### **GES125 SUBURBAN SPRAWL UNDER THE MICROSCOPE/LECTURE, DISCUSSION, FIRST YEAR SEMINAR**

See Geography 125.

### **GES126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION**

See Geography 126.

### **GES127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE**

See Geography 127.

### **GES136 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION**

See Geography 136.

### **GES141 RESEARCH DESIGN AND METHODS IN GEOGRAPHY/LECTURE, DISCUSSION**

See Geography 141.

### **GES157 THE POLITICS OF U.S. ENVIRONMENTAL ISSUES/LECTURE, DISCUSSION**

See Government and International Relations 157.

### **GES179 GLOBAL ENVIRONMENTAL JUSTICE/ LECTURE, DISCUSSION, FIRST-YEAR SEMINAR (IN ALTERNATE YEARS)**

See Geography 179.

### **GES180 THE EARTH TRANSFORMED BY HUMAN ACTION/LECTURE, DISCUSSION**

See Geography 180.

### **GES190 RASTER GIS/LECTURE, LABORATORY**

See International Development and Social Change 190.

### **GES224 ECONOMY AND ENVIRONMENT/ LECTURE, DISCUSSION**

See Geography 224.

### **GES226 WHO FEARS WHAT AND WHY: SOCIAL THEORIES OF ENVIRONMENTAL RISKS AND HAZARDS/SEMINAR, LECTURE, DISCUSSION**

See Geography 226.

### **GES232 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION**

See Geography 232.



**GES237 FEMINISM, NATURE AND CULTURE/ SEMINAR**

See Geography 237.

**GES247 INTERMEDIATE QUANTITATIVE METHODS IN GEOGRAPHY/LECTURE, LABORATORY**

See Geography 247.

**GES263 THE CLIMATE SYSTEM AND GLOBAL ENVIRONMENTAL CHANGE/ LECTURE, DISCUSSION**

See Geography 263.

**GES274 AFRICA'S DEVELOPMENT IN GLOBAL CONTEXT**

See Geography 274.

**GES280 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION**

See Geography 280.

**GOVT216 COMPARATIVE ENVIRONMENTAL POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 216.

**GOVT251 U.S. SOCIAL MOVEMENTS AND INTEREST GROUPS/LECTURE, DISCUSSION**

See Government and International Relations 251.

**ID112 LEADING ISSUES IN SUSTAINABLE DEVELOPMENT**

See International Development and Social Change 112.

**ID125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT/LECTURE, DISCUSSION**

See International Development and Social Change 125.

**ID131 LOCAL ACTION, GLOBAL CHANGE/LECTURE, DISCUSSION**

See International Development and Social Change 131.

**ID245 CULTURE, POLITICS, AND INTERNATIONAL DEVELOPMENT/LECTURE, DISCUSSION**

See International Development and Social Change 245.

**ID253 SOCIAL MOVEMENTS, GLOBALIZATION AND THE STATE/LECTURE, DISCUSSION**

See International Development and Social Change 253.

**ID260 QUANTITATIVE MODELING/LECTURE DISCUSSION**

See International Development and Social Change 260.

**ID269 RACED NATURE, GENDERED DEVELOPMENTS: THE POLITICAL ECONOMY OF ENVIRONMENTAL CONSERVATION/SEMINAR**

See International Development and Social Change 269.

**ID294 PARTICIPATION AND ENVIRONMENTAL MANAGEMENT/LECTURE, DISCUSSION**

See International Development and Social Change 294.

**ID296 VECTOR GIS/LECTURE, LABORATORY**

See International Development and Social Change 296.

**MGMT252 GREEN BUSINESS MANAGEMENT**

See Management 252.

**PHIL131 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 131.

**PHYS140 ENERGY AND THE ENVIRONMENT/LECTURE, DISCUSSION**

See Physics 140.

**SCRN107 INTRODUCTION TO VIDEO PRODUCTION**

See Screen Studies 107.

**SOC232 POPULATION, ENVIRONMENT AND DEVELOPMENT/VARIABLE FORMAT**

See Sociology 232.

**SOC265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE/VARIABLE FORMAT**

See Sociology 265.

**GOVERNMENT AND INTERNATIONAL RELATIONS****Program Faculty**

Sharon Krefetz, Ph.D.- Chair

Robert Boatright, Ph.D.

Michael Butler, Ph.D.

Mark Miller, Ph.D.

Paul W. Posner, Ph.D.

Srinivasan Sitaraman, Ph.D.

Valerie Sperling, Ph.D.

Kristen Williams, Ph.D.

**Adjunct Faculty**

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Cynthia Enloe, Ph.D.

Douglas Little, Ph.D.

Robert Ross, Ph.D.

**Visiting Faculty**

Phil Nicholas, Ph.D.

Anat Niv-Solomon, Ph.D.

**Emeriti Faculty**

John Blydenburgh, Ph.D.

**Program Overview**

The Department of Government and International Relations offers a major, a minor, and elective courses for non-majors. The curriculum provides opportunities for students to explore many important political questions faced by people in countries all over the world. For example, why are some governments stable and others not? How do formal government institutions and informal political resources affect the ability of leaders to govern effectively? What factors cause wars or contribute to a peaceful resolution of conflicts? How do public policies affect citizens' lives and how can citizens affect those policies? In what ways do differences in the social characteristics of people, such as their race, religion, gender, or ethnic background, affect their political attitudes and behavior? And most important, who has the power to decide these and other questions? Courses in the department acquaint students with theories, concepts, and information and equip them with tools for investigation that they can use to develop their own answers to such questions.

**Undergraduate Requirements**

The major provides a framework designed to ensure that students will become familiar with a variety of general aspects of politics and will gain depth in a subfield of particular interest to them. The three subfields are: American Politics and Public Policy; Comparative Politics; and International Relations. Students must take a total of 14 courses for the major, 11 in the Government Department and three in other disciplines that complement the study of politics and explore the relationships between government and other fields. The 11 Government courses students take are divided into two categories, general and subfield specialization.

Six general courses are required: one subfield introductory course (in addition to the introductory course in one's subfield specialization); one government course on normative political theory (GOVT155, 156, 203 or 206); one course on political research methods and skills (GOVT107); and three government courses in subfields other than the student's specialization (one of which must be a 200-level course).

Five courses are required in the subfield specialization that a student chooses: the introductory course (either GOVT050 Introduction to American Government, GOVT070 Introduction to Comparative Politics or GOVT069 Introduction to International Relations) and four additional courses in the subfield. One of these courses must be a seminar taken in the junior or senior year, and at least one other must be an advanced 200 level course.

Three courses outside the Government Department are required: ECON10 Economics and the World Economy; a history course related to the student's subfield specialization; and a third course in a discipline related to the student's subfield specialization, selected from a list of related courses in consultation with the student's faculty advisor.

## **Subfield Descriptions**

### ***American Politics***

Students who specialize in American Politics and Public Policy study political and governmental institutions, political processes, and patterns of political behavior in the United States. Subfield specialists become familiar with each of these areas, learning how the political system operates, why public policies emphasize particular values and allocate certain resources to different groups and individuals, and who benefits and who loses in the outcomes of policies in areas such as housing, the environment, and the economy. The federal structure of the U.S. government and the diversity of the American population make it important for students to consider variations in politics at different levels and in different settings, such as states, cities and suburbs, laws and courts.

### ***Comparative Politics***

Comparative Politics has two intertwined meanings at Clark: 1) in-depth study of politics in two or more countries outside the United States, and 2) systematic comparisons of important aspects of politics, such as social movements or policy-making processes, in two or more countries. Subfield specialists are given the opportunity to delve into politics as experienced by elites and by ordinary people in other countries. While the U.S. is intentionally not a central focus in comparative politics courses, most of them do raise specific questions about American politics—its policies, assumptions, and issues—viewed from the perspectives of people in other countries, such as South Africa, Mexico or Russia. The study of comparative politics makes students aware of variations and, sometimes, surprising similarities in how power is gained, justified, and wielded in different countries.

### ***International Relations***

Government majors who specialize in International Relations address global politics at two intersecting levels: formal state-to-state behavior in terms of diplomacy, war and peace, intervention, law and organization; and translation of global interactions in terms of trade, development, social movements, refugees, human rights, ecology and media. Subfield specialists engage in rigorous theoretical investigations of competing analytic traditions as they attempt to explain ongoing problems of world order. Some of these problems are local, such as boundary disputes; some are regional, such as regional economic integration; and some are global, such as poverty, the greenhouse effect or militarization. Similarly, the actors in world politics are diverse: national governments, subnational governments, international organizations, private interest groups, social classes and religious movements.

## **General Courses**

GOVT090 First-Year Seminars  
GOVT107 Research Methods  
GOVT155 Roots of Political Thought  
GOVT203 Political Theorists and Their Theories/Seminar  
GOVT206 Recent Political Theory  
GOVT260 Democratic Theory/Lecture, Discussion  
GOVT279 Obscenity Law and Related Topics  
GOVT297 Senior Honors Thesis in Government and International Relations  
GOVT298 Internship  
GOVT299 Independent Study

## **American Politics and Public Policy**

GOVT050 Introduction to American Government  
GOVT091 The Gender Gap and American Politics/  
First-Year Seminar  
GOVT154 The Politics of Public Policy in the United States  
GOVT157 The Politics of Environmental Issues  
GOVT170 American Political Thought and Behavior  
GOVT171 Urban Politics: People, Power and Conflict  
in U.S. Cities  
GOVT172 Suburbia: People and Politics  
GOVT175 Women and U.S. Politics  
GOVT204 The American Presidency  
GOVT205 U.S. Campaigns and Elections  
GOVT209 The United States since 1968  
GOVT213 Policy Analysis in the United States  
GOVT215 State and Local Government and Politics  
GOVT221 Urban Policy Seminar and Internship  
GOVT223 Suburban Policy Issues Seminar  
GOVT251 U.S. Social Movements and Interest Groups  
GOVT252 U.S. Political Parties  
GOVT253 U.S. Judicial Politics  
GOVT255 The Politics of the U.S. Congress  
GOVT272 U.S. Constitutional Law: Civil Liberties  
GOVT273 U.S. Constitutional Law: Governmental Powers  
GOVT274 The Supreme Court in American Society  
GOVT276 Environmental Law  
GOVT279 Obscenity Law & Related Topics  
GOVT281 The Politics of Policy Implementation/Seminar  
GOVT282 Housing and Community Development/Seminar  
GOVT291 Lawyers and American Politics/Seminar  
GOVT293 Constitutional Democracy/Seminar  
GOVT296 Advanced Topics in American Politics/Seminar

## **Comparative Politics**

GOVT070 Introduction to Comparative Politics  
GOVT090 Political Science Fiction/First-Year Seminar  
GOVT094 Dictators and Revolutionaries in Latin America/  
First-Year Seminar  
GOVT103 Africa and the World  
GOVT110 Introduction to Women's Studies  
GOVT117 Revolution and Political Violence  
GOVT125 Tales from the Far Side  
GOVT136 Sub-Saharan Africa: Issues and Problems  
GOVT173 Introduction to Latin-American Politics



GOVT177 Transitions to Democracy  
 GOVT178 South Africa: History and Contemporary Politics  
 GOVT179 Comparative Foreign Policy  
 GOVT186 Upheaval in Eastern Europe  
 GOVT208 Comparative Politics of Women  
 GOVT210 Violence in the Middle East  
 GOVT212 Politics, Culture and Society in Latin America  
 GOVT214 Mass Murder and Genocide Under Communism  
 GOVT216 Comparative Environmental Politics  
 GOVT218 Child Labor and the State: Comparative  
 Perspective/Seminar  
 GOVT219 Politics and Development of Southern Africa/Seminar  
 GOVT227 Global Politics of Development  
 GOVT228 Comparative Politics of Race, Ethnicity and Gender  
 GOVT230 Armenian Genocide  
 GOVT232 Politics and Religion in the Balkans  
 GOVT233 State Building in the Middle East and the Balkans  
 GOVT256 Corruption, Crime and Chaos in Contemporary Russia  
 GOVT257 Comparative Courts and Laws  
 GOVT275 Gender Politics and Development in Africa/Seminar  
 GOVT286 Advanced Topics in Comparative Politics/Seminar  
 GOVT290 Inter-American Relations/Seminar  
 GOVT293 Constitutional Democracy/Seminar

### **International Relations**

GOVT069 Introduction to International Relations  
 GOVT092 Women and War/First-Year Seminar  
 GOVT093 International Human Rights/First-Year Seminar  
 GOVT103 Africa and the World  
 GOVT146 The U.N. and International Law  
 GOVT147 World Order and Globalization  
 GOVT179 Comparative Foreign Policy  
 GOVT192 Asian Political Economy  
 GOVT211 International Cooperation  
 GOVT226 International Political Economy  
 GOVT238 U.S. Foreign Policy  
 GOVT240 Human Rights and International Politics  
 GOVT241 History of Human Rights  
 GOVT242 Human Rights and Transitional Justice  
 GOVT247 Seminar in Global Capitalism  
 GOVT250 U.S. National Security  
 GOVT268 Peace and War  
 GOVT280 Super Power Surrendering? Russia and the World  
 GOVT284 The Vietnam War  
 GOVT285 Special Topics in Peace Studies/Seminar  
 GOVT289 Advanced Topics in International Relations/Seminar

### **Honors Program**

Juniors with strong academic records may apply to the honors program, which expands research and writing skills through an in-depth systematic analysis of one specific topic. Students can achieve honors by successfully completing the honors program, which involves researching, writing and defending a senior thesis. Interested students should obtain guidelines in the department office and must submit applications by March 15 of the junior year.

### **Government and International Relations Minor**

The government minor requires a minimum of six courses in the department. One must be an introductory course (GOVT050, 069 or 070); one must be either in political theory (GOVT155, 203, 206 or 260) or in research methods (GOVT107); and four others can be in any of the subfield areas (including two at the 200 level). An internship supervised by a government faculty member and approved political science courses taken as part of an accredited study abroad program may be counted to fulfill one or more requirements for the minor.

### **Courses**

#### **GOVT050 INTRODUCTION TO AMERICAN GOVERNMENT/LECTURE, DISCUSSION**

Introduces the American governmental system. Overviews contemporary structure, operation and performance of national institutions, including the courts. Addresses American political culture, voting and elections, the evolution of federalism, law and politics, and important public issues, such as civil rights, civil liberties and economic change. Mr. Miller/Offered every year

#### **GOVT067 PROBLEMS OF GLOBALIZATION/LECTURE, DISCUSSION**

This course helps students understand and evaluate the challenges of globalization at the beginning of the 21st century. Students become familiar with the economic, social, political and cultural dimensions of the process. They are exposed to arguments for and against globalization and possible solutions to problems. The course is the sequel to Global Society (IDND 066), which lays the theoretical foundation. Staff/Offered every year

#### **GOVT069 INTRODUCTION TO INTERNATIONAL RELATIONS/LECTURE, DISCUSSION**

Introduces basic concepts of international relations, e.g., the balance of power, and broader alternative perspectives by which security can be viewed. Explores the development of the nation's state system, World War I, World War II, the Cold War, the post-Cold War period and issues such as human rights, environment, gender, war and economics. Ms. Williams, Mr. Sitaraman/Offered every year

#### **GOVT070 INTRODUCTION TO COMPARATIVE POLITICS/LECTURE, DISCUSSION**

The study of comparative politics is based upon the premise that we can better understand domestic political dynamics and political phenomena, in general, by comparing political conditions across and within (subnational units) countries. Specifically, comparative politics investigates the following types of questions: In what ways do groups and individuals participate in politics? Why have some countries developed stable democratic political systems, while others remain authoritarian or experience frequent changes in government? What relationship does a country's political organization have with its economic performance, social stability and relations with other countries? In exploring these questions, we compare both developed and developing countries in terms of political institutions (constitutions, executives, legislatures, courts and political parties), political behavior (voting and collective action), political culture and political economy. Mr. Posner/Offered every year

#### **GOVT080 MODEL UNITED NATIONS PROGRAM**

The Model United Nations program is a realistic simulation of the activities of ambassadors and representatives of different member nations who serve in various agencies of the United Nations. Students assume the role of ambassadors or special U.N. representatives. They participate in live simulations of the U.N. Security Council, Economic

Social and Cultural Council, and Special Middle East Summit. Students participate in the Harvard Model U.N. Conference every year. During this conference, Clark students known as delegates enter the world of diplomacy, negotiation and high politics as they grapple with complex realities of peace and security, human rights, women's rights and economic development, and they pit their skills against delegates from other universities representing different countries. Delegates prepare by thoroughly researching policy positions of countries they are representing and contribute to a lively exchange of ideas and simulate an authentic environment that parallels U.N. meetings. This active-learning experience complements classroom learning and prepares Clark students to enter a professional career in government, international organizations or the academe. Repeat registration allowed. Mr. Sitaraman/Offered every year

**GOVT090 POLITICAL SCIENCE FICTION/FIRST-YEAR SEMINAR**

Mr. Posner/Offered periodically

**GOVT091 THE GENDER GAP AND AMERICAN POLITICS/FIRST-YEAR SEMINAR**

Ms. Krefetz/Offered periodically

**GOVT093 DICTATORS AND REVOLUTIONARIES IN LATIN AMERICA/FIRST-YEAR SEMINAR**

Ms. Sperling/Offered periodically

**GOVT103 AFRICA AND THE WORLD/LECTURE, DISCUSSION**

Examines the historical and contemporary relationships of sub-Saharan Africa and Europe, the United States, the Middle East and parts of Asia, and Latin America. The course explores issues such as global involvement in Africa's civil wars, genocide in Rwanda, Islamic fundamentalism, the role of the World Bank and International Monetary Fund in Africa's development, and the impact of the HIV/AIDS pandemic. The role of the United Nations and nongovernmental organizations in development, conflict and humanitarian concerns is also explored. Staff/Offered every other year

**GOVT107 RESEARCH METHODS/LECTURE, DISCUSSION**

Considers the logic of the research process, from formulating and stating testable hypotheses and operationalizing concepts to collecting and analyzing appropriate data. Explores both concepts and techniques, including statistical analysis. Students design research projects independently or in teams, and analyze data using special social science computer programs. Ms. Krefetz, Staff/Offered every semester

**GOVT110 INTRODUCTION TO WOMEN'S STUDIES/LECTURE, DISCUSSION**

How do societal assumptions and understandings about sex, gender, masculinity and femininity, power and freedom shape our lives? This course explores the system of oppression known as patriarchy, asking what it is, what its effects are, and whether or how it can be altered to create a more just world for men and women alike. We also consider various intersecting systems of oppression (including racism, classism, homophobia and colonialism, among others) to see how they affect women's lives across the globe. Among the topics covered include: gender and socialization; feminism and feminist theories; women and work; families; politics; reproductive rights; violence against women; and women's movement activism in multiple countries. Ms. Sperling/Offered every four years

**GOVT117 REVOLUTION AND POLITICAL VIOLENCE/LECTURE, DISCUSSION**

Analyzes the concept, the causes and process of revolution. Is revolution inevitable? How does it differ from terrorism, guerrilla warfare or coups? This course examines the Russian and Chinese revolutions as

20th-century prototypes; comparisons are then drawn to more recent revolutions in Eastern Europe, the Middle East, Latin America and South Africa. Ms. Sperling/Offered every year

**GOVT125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT/LECTURE, DISCUSSION**

See International Development and Social Change 125.

**GOVT136 SUB-SAHARAN AFRICA: ISSUES AND PROBLEMS/LECTURE, DISCUSSION**

The course explores issues and problems confronting sub-Saharan Africa, including the legacy of colonialism, the establishment of nation-states, military rule, democratization, women's roles, and ethnic and class conflict, civil wars and genocide, the HIV/AIDS crisis, alternative development strategies, the environment, regional conflicts and Africa's role in the global economy. Staff/Offered every other year

**GOVT146 THE UNITED NATIONS AND INTERNATIONAL POLITICS**

The objective of this course is to develop a solid understanding of the United Nations; its organizational structure; major actors in the UN System; and its policies and programs. We also trace the evolution of international legal order and its implications for inter-state relations. The focus is on the scope and reach, general procedures, and legitimacy of international law. In addition, we analyze legal issues such as use of force, violation of territorial sovereignty, human rights, and humanitarian intervention. Mr. Sitaraman/offered every year.

**GOVT147 WORLD ORDER AND GLOBALIZATION/ DISCUSSION**

Explores the ways in which states have attempted to establish order in an anarchical international system. An overriding challenge to the existing world order, particularly in the post-Cold War period, comes from globalization (economic, political, social issues). Is globalization leading toward a single system of values, or fragmenting into incompatible pockets of pluralist identities? Ms. Williams/Offered every year

**GOVT154 THE POLITICS OF PUBLIC POLICY IN THE UNITED STATES/LECTURE, DISCUSSION**

Where do policy ideas originate? How do coalitions form in support or opposition to a policy? Do the dynamics of policy making vary across issues? Focuses on understanding public-policy development and implementation at the national level in the United States, including why some policies fail to develop or why they fail to take effect as intended. Includes assessment of prominent theories of policy development and in-depth analysis of cases. GOVT050 strongly recommended. Staff/Offered every other year

**GOVT155 ROOTS OF POLITICAL THOUGHT/LECTURE, DISCUSSION**

Western political thought from the classic Greek period to early modern liberalism and socialism is analyzed through contributions by major thinkers: Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau and Marx. Mr. Boatright/Offered every year

**GOVT157 THE POLITICS OF U.S. ENVIRONMENTAL ISSUES/LECTURE, DISCUSSION**

Why have environmental policies emerged or failed to emerge? What is distinctive about the politics of environmental issues? Primary focus is national environmental politics and policy making in the United States. Examines the character of policy action, public ideas, political leadership and institutional development across several prominent environmental issues. Assignments emphasize class discussion, oral presentations, group simulations and short written analyses. GOVT050 strongly recommended. Staff/Offered every other year



**GOVT170 AMERICAN POLITICAL THOUGHT AND BEHAVIOR/LECTURE, DISCUSSION**

Explores factors that have shaped a distinctive American political culture—our shared values, beliefs, attitudes and expectations of government. Considers how this culture is transmitted through the process of political socialization, in which our political orientations and behavioral predispositions are formed. Examines how political culture and socialization are connected to contemporary political attitudes and behavior. Ms. Krefetz/Offered periodically

**GOVT171 URBAN POLITICS: PEOPLE, POWER AND CONFLICT IN U.S. CITIES/LECTURE, DISCUSSION**

Focuses on the major socioeconomic and political forces that affect city politics in the United States. Topics include: the growth and decline of cities; fiscal constraints; federal and state urban policies; political machines; reforms; the post-Reform Era; the community power debate; regimes and coalition building; and efforts by African-Americans and Latinos to gain political incorporation. Ms. Krefetz/Offered every year

**GOVT172 SUBURBIA: PEOPLE AND POLITICS/LECTURE, DISCUSSION**

Focuses on the causes and consequences of the rapid growth of suburbs in the United States after World War II and their impact on the nature of metropolitan areas. What are the characteristics of the people who live in suburbs? Is suburban homogeneity a myth or a reality? How are suburbs governed? What is suburban political participation like? What are the patterns of policy making on issues such as education, zoning and property taxes? Ms. Krefetz/Offered periodically

**GOVT173 INTRODUCTION TO LATIN-AMERICAN POLITICS/LECTURE, DISCUSSION**

As an introduction to the study of Latin-American politics, this course demands no prerequisites except a basic curiosity about the region and a desire to learn about its development over the past century. In an effort to understand contemporary politics in the region, we consider alternative theoretical explanations for patterns of development as well as analyze the historical role played by influential political actors, including the Church, the military, economic elites, workers and peasants. Some of the fundamental questions we will be asking include: What is the relationship between a country's social and economic conditions and its political system? Why have so many Latin-American nations alternated between democratic and authoritarian regimes? What is the relationship between Latin America and the so-called "First World," particularly the United States? In attempts to answer these questions, the course will examine the political systems of Argentina, Brazil, Chile, Mexico and Guatemala. Mr. Posner/Offered every other year

**GOVT175 WOMEN AND U.S. POLITICS/LECTURE, DISCUSSION**

Explores the political attitudes, behavior and status of women in the United States. Views on the nature of women and their "proper" role in society and the state, set forth by classical political philosophers in ancient times, are contrasted with ideas introduced by women's rights theorists beginning in the 18th century. The main focus is on contemporary U.S. politics, including gender differences in political socialization and political participation, the gender gap in voting preferences, women as politicians and bureaucrats, and the influence of women on public policies. Ms. Krefetz/Offered every other year

**GOVT177 TRANSITIONS TO DEMOCRACY/LECTURE, DISCUSSION**

How can a dictatorship become a democracy? What challenges face countries emerging from repressive rule? Using firsthand accounts, historical analyses and contemporary films, this course explores the role of grassroots movements, elites and the international context in struggles to create and sustain democracy. The focus will be on transitions from totalitarian and authoritarian regimes in Europe and military dictatorships in Latin America. Mr. Posner, Ms. Sperling/Offered every other year

**GOVT178 SOUTH AFRICA: HISTORY AND CONTEMPORARY POLITICS/LECTURE, DISCUSSION**

The course acquaints students with the forces that have shaped the politics in contemporary South Africa. It examines colonialism, apartheid, African nationalism and the antiapartheid struggle, the role of African women, politics since the election of Mandela, the impact and politics of the HIV/AIDS crisis, South Africa's economic and political role in the southern Africa region, and Western involvement in the country during apartheid and postapartheid eras. Staff/Offered every other year.

**GOVT180 INTERNATIONAL ORGANIZATIONS**

International Organizations (IOs) have grown in size, number, and institutional capacity since the end of the Second World War to address various policy matters in the area of economics, trade, taxation, finance, intellectual property rights, environment, human rights, international security, and humanitarian intervention. The increasing complexity of the global political economy has made policy coordination and harmonization through international organizations absolutely necessary because of the absence of a centralized governing authority at the international level. As the demand for IOs have increased, they have also become more controversial and divisive with supporters seeking to strengthen them, while detractors are attempting to modulate their influence. This course explores the complex roles international organizations play in navigating international politics and mediating transnational policy issues by concentrating on a select set of international organizations that are central to the day-to-day functioning of the global political economy. Mr. Sitaraman/Offered periodically

**GOVT186 UPHEAVAL IN EASTERN EUROPE/LECTURE, DISCUSSION**

Within a dramatic and short space of time, Eastern Europe was transformed from a homogenized communist bloc to a region brimming with diversity, complexity and unfulfilled potential. The course examines the transformations ranging from Stalinism to pluralism. Why did the revolutions of 1989 occur? What are the difficulties in transition to market economies and democracy? Ms. Sperling/Offered periodically

**GOVT190 LEADERSHIP IN AMERICAN POLITICS**

This course explores the changing ideas about what constitutes good political leadership in the American governmental system. The approach is developmental, beginning with the framing of the constitution and tracing the evolution of beliefs among both elites and the people at large. Students will engage in a shared search for major shifts over time in what Americans have broadly accepted as the essential components of proper leadership behavior. The vehicles for this shared exploration will include brief lectures, extensive discussion of assigned readings, guest speakers, and several writing assignments combining research, analysis, oral presentation and discussion leading. Staff/Offered every other year

**GOVT192 POLITICAL ECONOMY OF ASIA**

This course is an introduction to the political economy of Asia. Primarily the course will focus on the economies of East and Southeast Asia, and to some extent on India. In the past few decades, the Asian economies have grown at a rapid pace and performed exceedingly well relative to the economies of other developing countries. We rely on comparative-historical analysis, economic history and analytical tools used by economists and political scientists to examine the reasons behind the explosive growth in Asian economies. In addition, we analyze the role of the state in promoting economic growth and accelerating Asia's global integration. Mr. Sitaraman/Offered periodically

**GOVT201 THE HIV/AIDS CRISIS IN AFRICA**

This course acquaints students with the complex economic, social, political and cultural forces that shape the HIV/AIDS pandemic in sub-Saharan Africa. It explores the reasons for Africa's high prevalence rates, the gendered nature of the pandemic, the impact of HIV/AIDS on children and on development, the responses of African governments, nongovernmental organizations and the larger international community, and the political economy of prevention and treatment, including the politics of global pharmaceutical drug pricing. Staff/Offered periodically

**GOVT203 POLITICAL THEORISTS AND THEIR THEORIES/SEMINAR**

Focuses on one or two people whose theories have influenced ideas about power, governing, liberty, equality and justice. Explores their lives and the societies and events that shaped their ideas. Theorists who have been featured include Hannah Arendt, Alexis de Tocqueville, Erich Fromm and Karl Marx. Staff/Offered periodically

**GOVT204 THE AMERICAN PRESIDENCY/LECTURE, DISCUSSION**

Examines the president's changing role in American politics, evolution of the modern presidency, selection and nomination process, relationships with other political institutions, and presidential character. Explores proposed reforms for the future. Prerequisite: GOVT050 or permission of instructor. Staff/Offered every other year

**GOVT205 U.S. CAMPAIGNS AND ELECTIONS/LECTURE, DISCUSSION**

Examines elections and campaigns from a number of different perspectives: the theoretical underpinnings of American elections, their historical development, the rules by which campaigns are governed, and the strategies that candidates follow in pursuit of office. Although the focus is almost exclusively on national (presidential and congressional) elections, the goal of the course is to examine the process of elections from a standpoint that will enable students to understand and analyze the electoral process at various levels of government. The primary system, the role of the media, and the issue of campaign finance, among other topics, are also explored. Mr. Boatright/Offered periodically

**GOVT206 RECENT POLITICAL THEORY/LECTURE, DISCUSSION**

Examines a central normative category of modern democracy from a number of different perspectives: historical development of a distinctly modern public sphere, the liberal and civic republican accounts of the public sphere, and feminist and postmodern critiques. Mr. Boatright/Offered every other year

**GOVT208 COMPARATIVE POLITICS OF WOMEN/LECTURE, DISCUSSION**

Explores the roles, priorities, strategies and theories of women in the politics of industrialized and developing countries. Causes for changes or lack of genuine changes in women's political influence are investigated to shed new light on those countries' political systems. Discusses the politics of democratization, sexuality, labor and cross-race alliances. One or more previous courses in government or in women's studies is strongly advised. Staff/Offered every other year

**GOVT211 INTERNATIONAL COOPERATION**

This course is designed to address the question of how nation-states cooperate under the condition of international anarchy. The course begins by examining the theoretical problem of international cooperation. Then we study how states overcome the cooperation dilemma, and how formal and informal institutions reduce uncertainty, risk and facilitate reciprocity and enable international cooperation. We study how institutions are constituted and established, and how institutions evolve over time; what effects they have on states; and how they influence domestic and international policies of a state. The course focuses on analyzing competing perspectives on international cooperation, then shifts into studying how institutions address the cooperation problematique, and concludes by examining the implications of rapid proliferation of international institutions for nation-states, and international relations theory. Prerequisite: Introduction to International Relations or permission of instructor. Mr. Sitaraman/Offered every other year

**GOVT212 POLITICS, CULTURE AND SOCIETY IN LATIN AMERICA/LECTURE, DISCUSSION**

Provides an overview of the key economic and political issues confronting Latin America today: economic development and social inequality, international debt, the breakdown of democracies as well as transitions from authoritarian rule, revolutions, and the role of working-class, women's, peasant and ethnic movements. Draws on the analytical perspectives of the political economy and cultural politics to develop a nuanced and self-reflexive understanding of the complex realities of Latin-American politics. Ms. Asher, Mr. Posner/Offered periodically

**GOVT213 POLICY ANALYSIS/LECTURE, DISCUSSION**

How can society better determine what public problems exist? What policies will respond best to those problems? What impacts have public policies had? These are the questions that animate the policy analysis enterprise, which aims to improve public decision making. Introduces the structure, methods and subject matter of the field, helps students sharpen their analytic skills and explores several important public policy issues. Students present and discuss concepts and methods and engage in an intense analysis simulation. Prerequisite: GOVT107 or other social science methods course, or permission of instructor. Limited to juniors and seniors. Staff/Offered every other year

**GOVT214 MASS MURDER AND GENOCIDE UNDER COMMUNISM/LECTURE, DISCUSSION**

Is communism inherently genocidal? Do communism and mass murder necessarily go hand in hand? This course explores the origins, motivations and consequences of the brutal and deadly policies adopted in three very different communist regimes (the Soviet Union, China and Cambodia). We also consider potential ways to avert mass killing and genocide. Ms. Sperling/Offered every year



**GOVT216 COMPARATIVE ENVIRONMENTAL POLITICS/LECTURE, DISCUSSION**

Over the course of the past several decades environmental degradation and sustainability have assumed major significance as public-policy issues, both within nations and internationally. However, given the transnational nature of many environmental problems, addressing such problems has proven to be particularly complex and difficult. This course examines the complex nature of environmental policy from both an international and comparative perspective. We examine the specific challenges that the international nature of environmental problems poses for policy makers. We also compare different national experiences and strategies for addressing environmental issues with an eye toward identifying the factors which impede or facilitate success in promoting effective environmental policy. Mr. Posner/Offered every other year

**GOVT218 CHILD LABOR AND GLOBALIZATION/SEMINAR**

This course raises and attempts to answer a number of questions. Is globalization good or bad for child labor? Or is the record mixed? Taking a comparative perspective, the course looks at different forms of child labor in a number of developing countries, from carpet weaving in Iran, prostitution in the Philippines, and child soldiering in Liberia to factory work in Mexico and to plantation agriculture in Brazil and South Africa. It seeks to determine the impact of global trade, new communications and information technologies, World Bank and International Monetary Fund policies, and the rise of non-state actors on child labor; and explore the role of states in an increasingly globalized political economy. Staff/Offered periodically

**GOVT219 POLITICS AND DEVELOPMENT IN SOUTHERN AFRICA/SEMINAR**

Explores in a comparative way various issues in the politics and development of the Southern Africa region: race, class, gender, ethnicity, democratization, land reform, labor migration, the HIV/AIDS pandemic, the environment, child labor, the World Bank and the role and effectiveness of the Southern African Development Community. The countries covered include: South Africa, Lesotho, Swaziland, Botswana, Namibia, Zimbabwe and Mozambique. Staff/Offered every other year

**GOVT221 URBAN POLICY SEMINAR AND INTERNSHIP**

Focuses on how cities make and implement policies, exploring especially downtown redevelopment, neighborhood revitalization and housing policies. Students do an internship at a Worcester redevelopment, housing or other policy-making organization. Students discuss course readings and share experiences, combining perspectives of scholars and practitioners. GOVT220 or permission of the instructor is required. Limited to 12 students, with preference given to juniors and seniors. Ms. Krefetz/Offered every other year

**GOVT222 SUBURBAN POLICY ISSUES/SEMINAR**

Explores politics and policy making in suburban communities, especially zoning and land use, education and property taxes. Students conduct original research in suburbs of Worcester and Boston. Prerequisite: GOVT172 or permission of instructor. Ms. Krefetz/Offered periodically

**GOVT226 INTERNATIONAL POLITICAL ECONOMY**

Focuses on political determinants of international trade and finance, and to a lesser extent, on the economic determinants of international politics. We learn how the international economic system has evolved and examine how we arrived at this pivotal juncture called the "global

political economy." We study how the international political mechanism and historical forces led to the acceptance of certain economic models, theories and ideas. Particularly, the focus is on actual international economic processes, their inner workings and interlinkages. We analyze how domestic political alignments influence a country's trade and tariff policies. Why do some countries make decisions that seem to defy conventional economic logic? Why do some countries choose to trade more and some countries choose to restrict international trade? More important, in this course we try to unravel the mysteries behind the "international market system." How does it work? And what are its benefits and consequences? Mr. Sitaraman/Offered every other year.

**GOVT227 GLOBAL POLITICS OF DEVELOPMENT/LECTURE, DISCUSSION**

Expands the boundaries of development studies beyond local- or national-level phenomenon, to explore a key dimension of contemporary world politics. Extends the basic historical political economy framework, developed in GOVT145, to deal in greater depth with the ideas, interests and institutions that comprise the international development "regime." Staff/Offered periodically

**GOVT230 THE ARMENIAN GENOCIDE/LECTURE, DISCUSSION**

Examines the various dimensions of the Armenian Genocide, through scholarly analyses, survivor narratives, journalistic accounts and other sources. Through the course, students develop a detailed understanding of the actual events of the genocide, its social and political causes, and its immediate and long-term impact on individual Armenians and the Armenian nation, generally. Students will also treat in-depth the initial external response to the genocide, its political and legal aftermath, and the significant effort still made by the Turkish successor state to deny that the genocide occurred. Staff/Offered periodically

**GOVT238 U.S. FOREIGN POLICY**

This course identifies and analyzes the historical, cultural, institutional, economic and political influences and constraints shaping both the US foreign policy process and the policy outcomes of that process. Particular attention is paid to the evolution of America's grand strategy and major foreign policy initiatives during and after the Cold War, with the objective of providing students with a basis for understanding and critically evaluating the major foreign policy issues and challenges facing the United States in the contemporary international system. Mr. Butler/Offered periodically

**GOVT240 HUMAN RIGHTS AND INTERNATIONAL POLITICS/LECTURE, DISCUSSION**

In recent years, questions of human rights and humanitarian concerns have been central to debates on such varied issues as U.S. relations with China, NATO's role in the former Yugoslavia, and the United Nation's place in the international system. The more general question of whether foreign policy should be based strictly on national interests or also include moral considerations has been long-standing, but it is particularly relevant in a post-Cold War world where national interests and priorities are less clear. Appeals to students interested in learning more about current policy disputes and in further exploring the impact of ideas in international politics. Staff/Offered periodically

**GOVT241 HISTORY OF INTERNATIONAL HUMAN RIGHTS/LECTURE, DISCUSSION**

See History 241.

**GOVT242 HUMAN RIGHTS AND TRANSITIONAL JUSTICE/LECTURE, DISCUSSION**  
See Sociology 242.



**GOVT243 EUROPEAN UNION**

This course provides a comprehensive overview of the emergence, construction, evolution and future of the most prominent example of "pooled sovereignty" in the international system: the European Union. The course critically examines and evaluates the political, cultural, economic, social and normative factors that have propelled the process of European integration forward. Through course readings as well as lecture and discussion, students assess the "European project" from both a historical and contemporary standpoint. This assessment requires examination of the implications of constructing a single market, currency, foreign and defense policy, regulatory structure, legal infrastructure, legislature and citizenship from both a European and a wider global perspective. Students should come away from this course with extensive knowledge of the core concepts, actors, approaches and issues involved in the economic and political development of the European polity from its founding in the 1950s through the treaty on European Union and into the 21st century. Mr. Butler

**GOVT247 GLOBALIZATION: FASHION AND FOUL PLAY/SEMINAR**

See Sociology 288.

**GOVT249 THE WESTERN POWERS AND THE ARMENIAN GENOCIDE**

See History 247.

**GOVT250 U.S. NATIONAL SECURITY/LECTURE, DISCUSSION**

Explores domestic and international politics of American national security policy, including the use of force, arms control and diplomacy. Examines the historical background and principal policy-making institutions in security policy, particularly the gap between civilians and the military. Case studies focus on the Vietnam War, the Persian Gulf War and Bosnia. Ms. Williams/Offered every year

**GOVT251 U.S. SOCIAL MOVEMENTS AND INTEREST GROUPS/LECTURE, DISCUSSION**

Examines the strategies of social movements and interest groups for mobilizing resources and lobbying the state. Considers theoretical frameworks used to study mobilization and action, including the pluralist, power elite and "cycle" theories for interest groups, and collective action, resource mobilization, and political process models of social movements. Mr. Boatright/Offered periodically

**GOVT252 U.S. POLITICAL PARTIES/LECTURE, DISCUSSION**

Examines historical development of the party system in the United States and the structures and activities of the two major parties. Examines historical successes and failures of various types of third parties and comparative analysis with parties in other advanced democracies. Prerequisite: GOVT050 or permission of instructor. Mr. Boatright/Offered periodically

**GOVT253 U.S. JUDICIAL POLITICS/LECTURE, DISCUSSION**

Explores the relationships between the courts and other sectors of the American political system. Studies how judges are selected, how courts handle civil and criminal cases, judicial policy making, and how interest groups use the courts. Mr. Miller/Offered every other year

**GOVT255 THE POLITICS OF U.S. CONGRESS/LECTURE, DISCUSSION**

Examines contemporary politics of the U.S. Congress from individual and institutional perspectives. Includes Congressional elections, differing views of representation, House-Senate differences, Congressional policy making, relationships between Congress and the courts, the presidency, the bureaucracy and interest groups, and the future of the institution. GOVT050 is highly recommended. Mr. Miller/Offered every other year

**GOVT256 RUSSIAN POLITICS: FROM DICTATORSHIP TO DEMOCRACY AND BACK AGAIN**

In this introduction to the study of Russian politics, we explore how a single political party has come to dominate the national stage, while opposition politicians are jailed, human rights are violated, and journalists fall victim to assassins' bullets. In many ways, Russia appears to be turning back into a dictatorship only 15 years after throwing off seven decades of repressive communist party rule. Why and how has this happened? Through lectures, discussions, and films, we examine contemporary Russia's politics, economics, and culture. The course touches on Russia's history from 1917 to 1991, but our main focus is on the contemporary period. Ms. Sperling/Offered every other year

**GOVT257 COMPARATIVE COURTS AND LAW/LECTURE, DISCUSSION**

Examines the court systems, legal systems and role of the legal profession in various North American and Western European countries, including Canada, the United States, the United Kingdom, France, Luxembourg and Germany. Comparisons include the concepts of judicial review, constitutionalism and the role of the courts in the broader governmental system. The course also explores how the European Union and the Canadian Supreme Court will integrate the legal system from both the Common Law and Civil Law legal traditions. Mr. Miller/Offered every other year

**GOVT258 U.S. SOCIAL POLICY**

How are public policies made? What shapes social policies in the United States? This course examines the process of making social policy in the United States. After looking at the actors and institutions involved in the policy-making process, we focus on the development of some of the major areas of U.S. social policy, such as social welfare and health policy. Staff/Offered periodically

**GOVT259 POLITICAL PARTICIPATION IN THE UNITED STATES**

In this class we consider the different types of political activity in which American citizens engage, evidence regarding changes in Americans' political participation over time, and techniques that have been proposed to increase political participation. We consider survey research on who participates in different types of activities, considering the role of, among other things, race, gender, education and income. We then study different types of participation, including voting, interest group membership, jury service, and membership in religious and public-service organizations. Mr. Boatright/Offered every other year

**GOVT260 DEMOCRATIC THEORY/LECTURE, DISCUSSION**

This course fulfills the political theory requirement for the Government major. It traces the development of democratic theory from its origins in ancient Athens to the present day. We examine how diverse conceptualizations of democracy address key issues in democratic theory and practice, including the constitution of liberty, equality and political authority; the definition and actualization of citizenship; the proper relationship between the individual and the state; the proper balance between majority and minority rights; and the best means for citizens to participate in democratic government. We consider each of these key issues through our reading of influential works in the development of democratic theory and our active discussion of these works. This reading and discussion enables us to broaden both our understanding of the democracy in which we live and our role as citizens within it. Formerly GOVT156. Not open to students with credit for GOVT156. Mr. Posner/Offered every other year



**GOVT262 REPRESENTATION AND DELIBERATION THEORY/LECTURE, DISCUSSION**

Representative democracy rests upon two competing expectations: first, that elected officials faithfully represent the views of their constituents; and second, that elected officials deliberate amongst each other about policy outcomes. This course examines the tension between these two expectations. Under what circumstances should representatives ignore the views of their constituents? How should they act when they conclude that their constituents do not know what is best for them? And how can they represent the views of minorities? The course draws equally from theoretical works on representation and deliberation and from applied work on contemporary problems, including differences in voting and legislative systems, redistricting, and representation of racial and ethnic minorities. Mr. Boatright/Offered periodically

**GOVT268 PEACE AND WAR**

An examination and analysis of the various theories in the field of international relations as related to the origins, duration, and conclusion of wars. Looking at both historical and contemporary cases, we assess the factors that contribute to the outbreak of war (i.e., nationalism, territory, economics and security dilemmas) as well as the emergence of peace (i.e., international institutions, alliances and the balance of power). The course concludes with an exploration of the challenges for preventing future wars and enhancing the possibility of peace. Ms. Williams/Offered periodically

**GOVT269 COMPARATIVE FOREIGN POLICY/LECTURE, DISCUSSION**

This course explores the impact of both domestic factors and the international setting on the foreign-policy process. Courses in foreign-policy analysis have traditionally focused on the ways in which governments pursue the "national interest" through various implements of statecraft (military force, diplomacy, economic statecraft). While this course does encompass this traditional interpretation of foreign policy-making, we will also examine the ways in which an ever-changing international political environment has altered the conduct of foreign policy and state behavior. Relevant changes include the proliferation of multilateral instruments and institutions, the rise of non-state actors and NGOs, the increasing salience of issue areas such as energy, technology and human rights, and the emergence of new policy options and constraints specific to the post-Cold War era. Befitting its title, the course is devoted to cross-national comparison of foreign-policy interests, process and outcomes in a range of countries (excluding the United States). Mr. Butler/Offered periodically

**GOVT271 THE AMERICAN JURY SYSTEM/LECTURE, DISCUSSION**

See Government and International Relations 271.

**GOVT272 U.S. CONSTITUTIONAL LAW: CIVIL LIBERTIES/LECTURE, DISCUSSION**

Focuses on the historic and contemporary role of the U.S. Supreme Court in interpreting the U.S. Constitution. Includes cases dealing with freedom of religion and speech, privacy, discrimination and equal protection. Students may take GOVT272 and 273 in any order. Mr. Miller/Offered every other year

**GOVT273 U.S. CONSTITUTIONAL LAW: GOVERNMENTAL POWERS/LECTURE, DISCUSSION**

Focuses on the historic and contemporary role of the U.S. Supreme Court in interpreting the U.S. Constitution. Includes cases dealing with powers of Congress and the President, federalism and economic rights. Students may take GOVT272 and 273 in any order. Mr. Miller/Offered every other year

**GOVT274 THE SUPREME COURT IN AMERICAN SOCIETY/LECTURE, DISCUSSION**

Examines various aspects of the role that the Supreme Court of the United States plays in our system of government and in our broader social order. Examines various topics, such as the role of the Court in producing social change, the jurisprudence of individual justices, and recent trends in the Court's decisions on federalism, administrative law and statutory interpretation. Also explores the aftermath of the Court's decision in *Bush v. Gore*. Mr. Miller/Offered periodically

**GOVT276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION**

A survey course in environmental law, with special emphasis placed on the practical skills necessary to understand and apply environmental laws and regulations. Topics include the history and development of modern environmental law, basic administrative law principles, water-pollution control, wetlands protection, environmental-impact review, solid- and hazardous-waste management, disposal and site remediation, plus land-use controls and "takings" issues. Covers the major federal environmental statutes and draws upon Massachusetts law for examples of state and municipal initiatives. Staff/Offered every year

**GOVT278 GENOCIDE IN COMPARATIVE PERSPECTIVE**

An investigation of genocides by the comparative historical method. The situation and actions of the perpetrators, victims, resistance fighters, bystanders, and rescuers will be examined in order to find essential similarities as well as differences and to derive explanations for select cases of genocide. Staff/Offered periodically

**GOVT279 OBSCENITY LAW AND RELATED TOPICS**

This course will explore obscenity law and other topics including the role of local governments in attempting to prevent sexually oriented businesses in their jurisdictions. It will also examine laws to prevent minors from viewing sexually oriented materials. It will look at the differences between pornography and obscenity in print, on the internet, in broadcasting and in other media. This course will also examine such issues as child pornography. Staff/Offered periodically

**GOVT281 THE POLITICS OF POLICY IMPLEMENTATION/SEMINAR**

Explores, in-depth, the philosophical, legal, political and organizational challenges of implementing public policy and enforcing public law. Focuses specifically on the political and managerial challenges administrative agencies face. Students confront implementation dilemmas through case studies and research on agencies and policies. Prerequisite: GOVT154 or permission of instructor. Staff/Offered every other year

**GOVT282 HOUSING POLICIES AND POLITICS/SEMINAR**

Focuses on social, economic and political factors that shape the federal government's housing policies and their implementation by local governments in metropolitan areas of the United States. Explores the myths and realities of public housing, urban renewal, gentrification, linkage, homelessness, redlining, exclusionary zoning, and racial and gender discrimination in housing. Ms. Krefetz/Offered every other year

**GOVT284 THE VIETNAM WAR/LECTURE, DISCUSSION**

See History 286.

**GOVT285 SPECIAL TOPICS IN PEACE STUDIES/SEMINAR**

See Peace Studies 285.

**GOVT286 ADVANCED TOPICS IN COMPARATIVE POLITICS/SEMINAR**

Focus changes each year depending on faculty interest. Has focused on "International Feminist Thinking" and "Politics of Nationalism." Open to juniors, seniors and graduate students. Can be taken twice. Mr. Posner, Ms. Grier, Ms. Sperling/Offered every year

**GOVT289 ADVANCED TOPICS IN INTERNATIONAL RELATIONS/SEMINAR**

Focus changes with each offering, depending on faculty interest. Recent topic: development, underdevelopment and the causes of internal conflict. Open to juniors and seniors. Can be taken twice. Staff/Offered every year

**GOVT290 INTER-AMERICAN RELATIONS/SEMINAR**

This course examines the historical and contemporary relations between the United States and Latin-American countries. After a brief historical overview of U.S. foreign policy toward Latin America, we explore various themes central to U.S.-Latin American relations. Topics include the impact of U.S. hegemonic rule; revolutionary challenges to U.S. hegemony; economic relations, including Dollar Diplomacy and NAFTA; defending national security, democracy and human rights; the "war on drugs"; and the Latin Americanization of the United States. While we seek a deeper understanding of common patterns in U.S.-Latin American relations, the course also emphasizes the uniqueness of national experiences. Mr. Posner/Offered every other year

**GOVT291 LAWYERS AND POLITICS/SEMINAR**

Examines the role played by lawyers in American politics. Topics include lawyers in private practice, lawyers in legislatures, lawyers as judges, lawyers as lobbyists, government-agency lawyers and academic lawyers. Mr. Miller/Offered every other year

**GOVT293 CONSTITUTIONAL DEMOCRACY/SEMINAR**

Writing a constitution means creating a people. It is at once a very conservative and a very daring undertaking. It is also the most fundamental of political acts. What considerations are within the purview of the constitution maker? What consequences follow from founding choices? Through analyses of the constitutions and constitutional foundations of the United States, India and South Africa, and through original student research, we confront these questions and the complexities of blending constitutionalism and democracy. Prerequisites: GOVT050, or permission of instructor. Limited to juniors and seniors. Staff/Offered periodically

**GOVT295 GLOBALIZATION AND DEMOCRACY/SEMINAR**

How does globalization affect democracy? As economics, politics, military action and social-change movements have become increasingly transnational, have state leaders become less accountable to their populations, and are they under little pressure to build liberal democratic institutions? Or has the increasingly global system been good for democratic state-building? Have transnational forces successfully pressured states to observe human rights and fight against corruption? Do they encourage state leaders to build accountable economic and legal institutions? We examine a variety of states and their struggles to consolidate liberal democracies, including Sierra Leone, Cambodia and Russia. Staff/Offered Periodically

**GOVT296 ADVANCED TOPICS IN AMERICAN POLITICS/SEMINAR**

Focus changes with each offering, depending on faculty interest. A past topic was "Politics of Rich and Poor." Open to juniors and seniors. Can be taken twice. Staff/Offered periodically

**GOVT297 HONORS THESIS****GOVT298 INTERNSHIP****GOVT299 INDEPENDENT STUDY**

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**HISTORY****Program Faculty**

Taner Akçam, Ph.D.  
Debórah Dwork, Ph.D.  
Janette T. Greenwood, Ph.D.  
Willem Klooster, Ph.D.  
Thomas Kuehne, Ph.D.  
Nina Kushner, Ph.D.  
Douglas Little, Ph.D.  
Olga Litvak, Ph.D.  
Drew McCoy, Ph.D.  
Ousmane Power-Greene, Ph.D.  
Amy Richter, Ph.D.  
Paul Ropp, Ph.D.

**Adjunct Faculty**

John Brown, Ph.D.  
Paul Burke, Ph.D.  
Richard Ford, Ph.D.  
Everett Fox, Ph.D.  
Thomas Massey, Ph.D.  
Mark Miller, Ph.D.

**Affiliate Faculty**

Robert Dykstra, Ph.D.  
Jack Larkin, M.A.  
Alden Vaughan, Ph.D.

**Emeriti Faculty**

George A. Billias, Ph.D.  
Daniel Borg, Ph.D.  
Paul Lucas, Ph.D.

**Program Overview**

The History Department offers a traditional major, a minor and elective courses for non majors. Undergraduate majors must choose one of three areas of geographic specialization—United States, European or global history. These specializations may be linked to course work in interdisciplinary concentrations such as Asian studies, Holocaust studies or women's studies. The History Department also offers a general track within the major for those seeking certification in elementary education.

The major exposes students to different fields of knowledge, offering training in critical thinking; the accumulation, organization and analysis of information; and clear and concise writing. The major provides an excellent background for graduate school, teaching, careers in law, government, journalism, international affairs, museum, library and archival work, and business. With courses on every major geographical



area of the world, and with conceptual approaches ranging from political and diplomatic to social, intellectual and cultural, the History Department offers a rich and diverse curriculum.

The department also participates in Clark's Higgins School of Humanities, allowing students to enjoy the support and benefits of the school.

## Undergraduate Requirements

All history majors must take 10 history courses and two related non-history courses distributed as follows:

1. HIST120 Writing History, should be taken before the junior year and before taking a research seminar.
2. Five courses inside their geographic area of specialization. Of these five courses, at least three must be at the 200 level and at least one must be a seminar or a proseminar.
3. At least one course in each of the two geographic areas different from their own area of specialization. (For example, a student specializing in European history would need to take at least one U.S. and one global history course). At least one of these two courses must be at the 200 level.
4. At least one course, either inside or outside their area of specialization, devoted primarily to the period before 1800. An up-to-date list of courses that meets this requirement may be found in the History Department Handbook.
5. A capstone course during the senior year. This requirement may be fulfilled by writing an honors thesis, or (with the permission of the chair and instructor) by taking a research seminar or directed-research course in the student's area of specialization. The capstone requirement cannot be met by any course used to meet conditions one through four.
6. Two courses outside history in fields related to the student's area of specialization. These courses must be approved in advance by the student's history adviser and must be taken after the student has declared herself or himself to be a history major.

Majors select an adviser from the history faculty and they consult regularly, especially before registering each semester. The student and adviser design a coherent sequence of courses, and choose non-history courses that enhance the area of concentration. They also can make decisions about advanced research courses and enrollment in the departmental honors program.

## Honors Program

The honors program in History provides outstanding majors with a challenging set of advanced courses and opportunity to pursue independent research. By the time that they become juniors, most History majors have discovered a particular topic that fascinates them, and some decide to explore that topic in greater depth by choosing the honors option. Honors in History is demanding. Completion of the Honors Program is also one of the requirements for admission to the department's accelerated degree program. Students enter the program by taking a prehonors seminar or proseminar. Admission into the honors program is contingent upon the completion of a prehonors seminar and upon evidence of outstanding work in other history courses. Building on the prehonors course, students write an extensive research thesis (two course credits) under the adviser's supervision. Seniors take

a directed-reading course (one course credit) related to their thesis topic. The program culminates with an oral defense of the student's thesis. The honors committee includes the student's thesis adviser and one other department member. If the committee finds the thesis or examination unsatisfactory, the student receives credit for directed readings/research.

## The Prehonors Seminar or Proseminar

To enroll in the honors program, students must take one of the department's seminars or proseminars that emphasize the development of research, analytical and writing skills. A significant part of these courses is devoted to the writing and revising of research papers. Students should consult with their advisers or the department chair in selecting a course that satisfies the prehonors requirement. This course is normally taken during the junior year.

## History Minor

Students who wish to obtain an undergraduate minor in history must meet the following requirements: a minimum of six history courses, at least three at the 200 level, and no more than four in any one geographical area. At least one of the six courses must be a seminar or a proseminar.

## Accelerated Degree Program

History offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

## Graduate Program

The department offers graduate programs in two broad areas: America, with tracks in the history of the United States and in the history of the Atlantic World; and, modern Europe, with tracks in the history of the Holocaust and in Genocide Studies. (Please note that applicants to the modern Europe program must intend to pursue one of these two specialized tracks). Both of these areas of study are augmented by instruction in non-Western areas. The department has particular depth in women's history (European, American, and Chinese), American diplomatic history, and Holocaust and Genocide history. Our close ties with the American Antiquarian Society and Old Sturbridge Village in Sturbridge are wonderful assets for graduate students in United States history. The department offers a graduate internship for credit at Old Sturbridge Village.

Graduate course work includes reading seminars (colloquia), research seminars, and individual tutorials for both reading and research purposes. Graduate students may also register in upper-division undergraduate courses at a graduate level that requires more intensive work. First- and second-year students in the doctoral program take three courses each semester, one of which must be expressly devoted to the production of a research paper. Faculty advisers help incoming students design their programs, which may include courses in other departments or colleges in the Worcester Consortium.

## Requirements

**Master of Arts** Because of our limited size, the department offers a terminal M.A. only through the Accelerated B.A./M.A. Program, limited to qualified Clark undergraduate history majors. For more specific information regarding the application process and requirements, please contact the Clark History Department.

## Doctoral Program

**Doctor of Philosophy** enables students to master the discipline of history through research, reading and teaching. In addition to meeting the 12-course requirements outlined above, a student who enters without an M.A. degree usually spends at least two full-time years at Clark, must satisfy the language requirement, teach at the college level, pass the preliminary examination and write a doctoral dissertation within seven years of matriculation. (Residency for part-time Ph.D. students is defined in terms of courses taken.)

Students concentrating in United States history must pass an examination in one foreign language, normally French, German, Spanish or Russian. Those specializing in Holocaust and Genocide Studies must pass examinations in two foreign languages, normally French and German. An examiner in each language determines if the student is proficient enough to use the language as a research tool. All language requirements must be satisfied before the preliminary oral examination is scheduled.

At the end of the first year, there is a required one-hour oral exam based on the first year's course work whether or not students have an M.A.

Some teaching experience at the college level is desirable for the Ph.D. degree. Students normally meet this requirement in their second and third years as teaching assistants.

New students, with their advisers, devise an appropriate plan of preparation for their doctoral qualifying examination, which is normally taken before the end of their third year.

Examination details are in the History Department Graduate Program Handbook. The exam constitutes the preliminary examination required by the Graduate Board. Students who pass may, upon request, receive the master of arts.

Students are advised to consider dissertation topics during their years of residence and to choose a possible dissertation adviser as soon as possible. The process of writing a dissertation is outlined in Format Regulations for Theses, Dissertations, and Research Papers at Clark University, which may be obtained from the thesis format adviser in the Graduate School Office.

## Courses

### **HIST011 SURVEY OF U.S. HISTORY TO 1865/LECTURE, DISCUSSION**

A survey of American history from the earliest 17th-century settlements through the end of the Civil War. Introduces students to historical inquiry and stimulates creative inquiry into the origins and character of American civilization. Fulfills the Historical Perspective. Staff/Offered every year

### **HIST012 SURVEY OF U.S. HISTORY 1865/LECTURE, DISCUSSION**

Chronicles the rise of America to world power, focusing on key internal and foreign policy developments and conflict. Private and public life and the diversity of Americans' experiences are highlighted. Attention is given to general political, social, economic and intellectual developments. Fulfills the Historical Perspective. Staff/Offered every year

### **HIST016 RACE AND ETHNICITY IN AMERICAN HISTORY/LECTURE, DISCUSSION**

Explores the influence that racial and ethnic patterns have on American history from colonial times to the present. Largely through first-hand accounts, students will explore the experiences of various ethnic and racial groups in American history. Fulfills the Historical Perspective. Ms. Greenwood/Offered every year

### **HIST021 VOICES FROM SLAVERY/FIRST-YEAR SEMINAR**

Explores the nature and dynamic of American slavery, largely from first-hand accounts of those who experienced and observed the slave regime of the American South in the 19th century. Designed to introduce students to the historical controversies concerning slavery and to expose students to the primary sources that historians use to understand slavery and the slave regimes. Fulfills the Values Perspective. Ms. Greenwood/Offered periodically

### **HIST033 CONFUCIANISM, DAOISM, BUDDHISM: THE CULTURAL HERITAGE OF CHINA/FIRST-YEAR SEMINAR**

This seminar will explore the most important intellectual and religious traditions of China—Confucianism, Daoism and Buddhism. In the first half of the course, we will cover the formative development of Confucianism and Daoism in China from about 500 BCE to roughly 200 CE; in the second half of the course, we will explore the rise of Buddhism in China and the later development of Confucianism and Daoism. Our method will be to read and discuss primary written sources (in English translation) from within these philosophical, religious and cultural traditions. We will try to understand the “inner logic” of each author, each tradition, and each school of thought, on its own terms. Lectures will provide historical background on the development of these three traditions. In frequent class discussions, we will focus on the interpretation of primary sources in Chinese philosophy, religion, art and literature. Fulfills the Historical Perspective requirement. Mr. Ropp/Offered every other year

### **HIST036 THE STRANGE WORLD OF THOMAS JEFFERSON/FIRST-YEAR SEMINAR**

Thomas Jefferson is one of the most familiar and increasingly controversial figures in American history. This seminar explores in-depth two related subjects: Jefferson's life and career (with emphasis on the intersection of the public and the private), and the central place of Jefferson's reputation and image in American culture from his time to ours. Students will read widely in recent scholarship on Jefferson as well as in primary sources. Fulfills the Historical Perspective. Mr. McCoy/Offered periodically

### **HIST037 19TH-CENTURY AMERICA THROUGH WOMEN'S EYES/FIRST-YEAR SEMINAR**

Examines key developments of the 19th century—industrialization, slavery and Civil War, westward expansion, immigration, Progressive reform—as considered in the personal writings of individual women. Traces larger trends and identifies common experiences of women, while also paying attention to the differences and divisions among them. Designed to encourage a questioning of historical sources themselves. How reliable are first-person narratives? Are diaries and letters ever truly private? How can historians read personal documents and rebuild the past through them? Ms. Richter/Offered periodically

### **HIST 039 AT HOME IN NINETEENTH-CENTURY AMERICA: DOMESTICITY AND AMERICAN CULTURE/FIRST-YEAR SEMINAR**

In order to underscore both the unity and diversity of nineteenth-century cultural life, this course revisits the variety of places Americans called home – middle-class suburban houses to working-class tenements, frontier dugouts to urban settlement houses – while considering the shifting interpretations of these spaces from within and without. Beginning with the rise of home as a haven from the uncertainties of public life, it traces the popular celebration of home as a moral force, notes the movement of domesticity into the public worlds of politics



and reform, and concludes with a consideration of home's relationship with and penetration by and of the marketplace. Ms. Richter/Offered periodically

**HIST040 THE WITCHCRAZE: WITCH HUNTS IN EARLY MODERN EUROPE/FIRST-YEAR SEMINAR**

From 1450-1750, hundreds of thousands of people were investigated for the crime of witchcraft across Europe and North America. Tens of thousands of them, mainly women, were executed. Over the course of the era, the figure of the witch as an ally of the Devil emerged and became an indelible part of Western culture. Yet scholars doubt that very many people in this period actually practiced witchcraft, or at least did so in the ways imagined by their prosecutors. The question then is why did all of this happen? How was the figure of the witch and the practice of witchcraft constructed? Why did they engender such panic at this particular time? Why were women so often accused? Why did the hunts begin and just as important, why did they end? This course will explore the history of the witch craze in order to provide the perspective to answer these questions. In the process, we will work on developing skills essential to the study of history: How do you pull the main points, the argument, out of a reading? How do you assess that argument? What is the raw material of history and how do historians use this raw material to write history? Ms. Kushner/Offered every other year

**HIST042 NAZI GERMANY: RISE AND FALL/FIRST-YEAR SEMINAR**

This course introduces students to the rise, the fabric, and the collapse of the "Third Reich." It starts with an investigation in how the Nazis came into power and why the first German democracy failed. The course then focuses on two related issues. Both are revolving around the success and the impact of Nazi politics in Germany and in Europe: How could Hitler and the Nazi Party establish its power in a country which was seen as a heart of Western culture? And: Why did so few Germans oppose Hitler and his racially based, terrorist regime? To explore these questions, the course will look on the various aspects of the Nazi ideology (racism, leader cult, people's community), on the techniques and the agencies of propaganda, seduction and terror. Fulfills Historical Perspective. Mr. Kuehne/Offered periodically

**HIST050 JESUS AND HISTORY/FIRST-YEAR SEMINAR**

See Classics 050.

**HIST062 WAR AND PEACE IN THE MIDDLE EAST/FIRST-YEAR SEMINAR**

Explores the cycle of war and peace in the Middle East during the past 100 years in order to answer three questions: What role has ethnic identity played in prolonging violent conflict in the region, not merely between Arabs and Israelis, but also between Shiite and Sunni Muslims? Have the United States, the Soviet Union and the other great powers served more as peacemakers or troublemakers in the Middle East? To what degree is the contemporary confrontation between America and radical Islam "a clash of civilizations"? Case studies will range from the birth of Israel to the September 11 attacks and their aftermath. Students will write a series of brief essays based on historical and literary documents ranging from the Balfour Declaration to Osama bin Laden's fatwa against the United States. Fulfills the Historical Perspective. First preference for enrollment will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Mr. Little/Offered periodically

**HIST070 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM ANCIENT HEBREWS THROUGH THE RENAISSANCE AND REFORMATION/LECTURE, DISCUSSION**

Outlines developments of Western society and our collective identity. Presents historical angles—cultural, religious, political, military, economic and social—and integrates these analytical approaches into a coherent, popular narrative. The medieval period is emphasized as the root of modern history. HIST070 and 071 are parts of a whole, but either course may be taken without the other. Fulfills the historical perspective. Ms. Kushner/Mr. Klooster/Offered every year

**HIST071 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM THE 17TH CENTURY TO THE PRESENT/LECTURE, DISCUSSION**

Same goal as HIST070. Covers the military revolution of the 16th century, the bureaucratic and scientific revolutions of the 17th century, the 18th-century Enlightenment, and the political, industrial, intellectual and social revolutions of the 19th and 20th centuries. HIST070 and 071 are parts of a whole, but either course may be taken without the other. Fulfills the historical perspective. Mr. Klooster/Offered every year

**HIST080 INTRODUCTION TO MODERN EAST ASIA/LECTURE, DISCUSSION**

Surveys modern historical trends in India, China, Japan, Southeast Asia and Korea. Through political biographies, literary selections and general histories, the course compares native traditions, colonial experiences and postcolonial developments in Asia since roughly 1800. Fulfills the Historical Perspective. Mr. Ropp/Offered every other year

**HIST103 AFRICA AND THE WORLD/LECTURE, DISCUSSION**

See Government and International Relations 103.

**HIST110 EARLY MODERN EUROPE/LECTURE, DISCUSSION**

An introduction to the history of Europe between 1400 and 1800. Students will examine the primary social, economic, religious, political and cultural events of the period and will gain an understanding of the important changes that occurred in the early modern era. Explores the Renaissance, Reformation, development of the state, emergence of capitalism, crisis of the seventeenth century, and French Revolution. Ms. Kushner/Offered every year

**HIST111 INTRODUCTION TO WOMEN'S STUDIES**

In this course we will explore the ways in which ideas about femininity and masculinity have shaped women's lives—locally and globally, in the present and historically—and how some women have challenged, even transformed, those meanings and the social relationships that flow from those two potent ideas. Among the topics that may be considered are: beauty, war, sports, politics, women's movements, sexuality, race, work, violence, fashion, family, globalization, feminism, creativity, religion, media and girlhood. This course will be taught in rotation by one of the following faculty: Prof. Ewing (Sociology), Prof. Richter (History) or Prof. Gale (Foreign Languages and Literatures). This course is open to all students in all majors. No prerequisites.

**HIST113 AMERICAN URBAN HISTORY/LECTURE, DISCUSSION**

Examines the urban experience in what is now the United States from its multiethnic colonial origins to its multiracial present. Emphasizes the relationship between the spatial and the sociopolitical organization of the city, from the Salem witch hunts through the Los Angeles riots. Focuses on several case studies, including Worcester and New York City. Fulfills the Historical Perspective. Ms. Richter/Offered every other year

**HIST115 AUTHORITY AND DEMOCRACY: THE HISTORY OF MODERN CENTRAL EUROPE/LECTURE, DISCUSSION**

This course serves as an introduction to the political, social and cultural history of the “heart of Europe” from the late-18th century through the end of the 20th century. It is not only concerned with Germany, but also with the various German-speaking regions of Europe and the interaction of the major cultures in that area. The course will start with the collapse of the political and social constitution of the Ancient Regime and the impact of the French Revolution on Central Europe. The course will trace the outbreak of the First World War and the impact it had on society. It will then explore the paradoxes of the “Age of Extremes” (E. Hobsbawm): the rise of a modern mass culture and the radicalization of mass violence during the first half of the century, the collapse of fragile democracies in the 1930s, the stabilization of the Nazi regime, and the organization of the Holocaust. The last part of the course will trace the irregular and unexpected developments toward democracy, peace and civil society since 1945 in a divided Central Europe. The course will conclude with an evaluation of the reunification of Germany and the future role of Germany in Europe. Mr. Kuehne

**HIST120 WRITING HISTORY/PROSEMINAR**

Introduces students to the discipline of history, with emphasis on the different types of historical writing and on the issues involved in the research and writing of historical studies. Ms. Kushner/Offered every semester

**HIST135 HISTORY OF ARMENIA/LECTURE, DISCUSSION**

Introduces the history of Armenia from antiquity to the modern times. Examines the formation of the Armenian state as an independent entity, the role of the major powers (eg, Byzantium, Persia), and the social and political institutions under the Armenian monarchies (eg, Bagratuni, Cilicia). Covers the history of modern Armenia from the late-18th to the 20th century, including the development of modern Armenian culture and political life in Ottoman and Russian Armenia. The course examines the emergence of the Armenian national movements, the events leading to the genocide, and the creation of the Republic of Armenia, Soviet Armenia, the re-emergence of the Republic of Armenia after the collapse of the Soviet Union, and the current issues confronting the Republic. Staff/Offered every year

**HIST142 CENTRAL EUROPE IN THE LONG 19TH CENTURY (1756-1914) LECTURE/DISCUSSION**

The “heart of Europe”—mainly the territory of today’s Germany, Poland, and the former Habsburg Empire—is often seen as crucial for the fate of Europe. The course surveys the political, social, economic, and cultural history of Central Europe in a period which was shaped by struggles between ethnical and religious movements, monarchs and citizens, the bourgeoisie and the working-class, as well as the rise of modern nation-states and imperialism that led to the First World War. Mr. Kuehne/Offered every year

**HIST143 WAR AND PEACE: CENTRAL EUROPE, 1914-2003**

The “heart of Europe” is often seen as crucial to the fate of Europe. This is true for the recent process of European unification and even more for the period of mass violence and genocide, which shaped Europe’s history in the first half of the 20th century. This course will trace the outbreak of the First World War and the impact it had on the political and social landscape of Central Europe. Special attention will be paid to the historical reasons and the political problems of the

changing borders and borderlands of nations like Germany, Austria, Poland, Hungary and Czechoslovakia. The course then explores the paradoxes of the “Age of Extremes” (E. Hobsbawm): the rise of a modern mass culture and the radicalization of mass violence during the first half of the century, the collapse of fragile democracies in the 1930s, the stabilization of the Nazi regime, the organization of the Holocaust, and the consequences of the war of extermination in Central Europe. The course will conclude with an evaluation of the reunification of Germany and the future perspectives of Central Europe as a center part of the European Union. Mr. Kuehne/Offered biannually

**HIST145 U.S. HISTORY THROUGH THE NOVEL/LECTURE, DISCUSSION**

Introduces American history with a distinctive and unconventional approach, resting on the assumption that we can gain access to the past by reading fiction. Students learn how to approach imaginative literature from an historical perspective and to appreciate the historical insight of writers who were keen observers of aspects of the making of modern America. Fulfills the Historical Perspective. Mr. McCoy/Offered every year

**HIST152 JEWS IN EARLY MODERN EUROPE AND COLONIAL AMERICA/LECTURE, DISCUSSION**

Between ca. 1400 and ca. 1800, the rights of most European Jews were severely restricted. Their story can only be told if we take into account the actions and measures of “gentiles” vis-a-vis the Jews. Having established what these conditions were, we will direct our attention to Jewish cultural and religious practices. The course starts with late medieval Christian myths and stories about Jews, scapegoating mechanisms and outright persecution. The course will end with the extension of greater freedom to the Jews in the Age of Democratic Revolutions, which made the question of assimilation an important issue. Mr. Klooster/Offered periodically

**HIST153 EUROPE IN THE AGE OF EXTREMES: THE 20TH CENTURY**

This course serves as an introduction into the political, social and cultural history of Europe from the beginning to the end of the 20th century. The survey is concerned with World War I and World War II, and with the nature of postwar stabilization and recovery. It focuses on the rise of dictatorships and the radicalization of mass violence during the first half of the century, as well as on the developments toward democracy, peace and civil society since 1950. The course will conclude with an evaluation of the remaking of Eastern and Western Europe in the 1980s and 1990s, the return of war and genocide to Europe, and present debates on the future of Europe. Mr. Kuehne/Offered every year

**HIST161 MODERN INDIA/LECTURE, DISCUSSION**

Through the study of cultural and historical documents as well as modern historical scholarship, studies the history of India emphasizing the nature of British rule in India from the 17th century to the mid-20th century. Formerly titled British India. Fulfills historical perspective requirement. Staff/Offered periodically

**HIST162 THE HISTORY OF THE MODERN MIDDLE EAST/LECTURE, DISCUSSION**

This course will focus on the decline of the Ottoman Empire and the emergence of nationalism in the Ottoman lands at the turn of the 20th century. Explores the internal and external factors that led to the rise of nationalism as both an ideology and a political movement among various social groups (especially the Greek, Armenian, Turkish, Kurdish, Arabic and Jewish populations living in the Ottoman Empire at that time), and discuss the disintegration of the Ottoman Empire



and the concomitant emergence of various nation states. Major themes include Ottoman attempts at reforms, the role of Islam, the Ottoman homogenization policy, massacres and ethnic cleansings, the First World War, the impact of international agreements on the emergence of different nation states in the region and the developments until Second World War. Fulfills the Historical Perspective. Mr. Akcam/Offered periodically

#### **HIST165 NAZI GERMANY AND THE HOLOCAUST/LECTURE, DISCUSSION**

Introduces students to the rise, the fabric and the collapse of the "Third Reich." It starts with an investigation in how the Nazis came into power and why the first German democracy failed. The course then focuses on two related issues. Both are revolving around the success and the impact of Nazi politics in Germany and Europe: How could Hitler and the Nazi Party establish its power in a country which was seen as heart of Western culture? And: Why did so few Germans oppose Hitler and his racially based, terrorist regime? Mr. Kuehne/Offered biannually

#### **HIST175 HOLOCAUST: AGENCY AND ACTION LECTURE, DISCUSSION**

This course is an introductory, gateway course to the history of the Holocaust. It aims to provide a foundation for more specialized seminars and lecture courses in this field (many of which are offered by the History Department), and is required for the concentration in Holocaust and genocide studies. The Holocaust was not a natural disaster, nor is history predetermined. Looking at a range of people, from national leaders to army generals to local religious figures to student activists, to victims, we will examine the choices they confronted and the actions they took. This course spans many centuries and covers the continent of Europe. Our primary focus, however, is the National Socialist era and the Holocaust. Ms. Dwork/Offered every other year

#### **HIST181 CHINESE CIVILIZATION/LECTURE, DISCUSSION**

Focuses on Chinese life, institutions and culture from the earliest times through the mid-19th century. Creative literature, philosophical writings and selected primary documents supplement information presented in interpretive texts and lectures. Fulfills the Historical Perspective. Staff/Offered every other year

#### **HIST182 MODERN CHINA/LECTURE, DISCUSSION**

Introduces events, personalities and concepts of importance for understanding China's history from the early-19th century to the present. Readings that present the Chinese view of events supplement interpretative studies by Western scholars. Fulfills the Historical Perspective. Mr. Ropp/Offered every other year

#### **HIST201 ERA OF THE AMERICAN REVOLUTION/ LECTURE, DISCUSSION**

Studies the origins, character and consequences of the American Revolution, from the erosion of imperial authority in the 1760s and 1770s to the Constitutional Convention of 1787. Emphasizes relation of ideology and political ideas to social development. Mr. McCoy/Offered every other year

#### **HIST216 SPECIAL TOPICS IN AMERICAN HISTORY/SEMINAR**

Content and topic vary with instructor. Staff/Offered periodically

#### **HIST221 AFRICAN-AMERICAN HISTORY TO 1865/LECTURE, DISCUSSION**

Examines the historical experience of blacks in America from the colonial period through the Civil War. Among the topics explored are the evolution of slavery and changing conceptions of race. Mr. Power-Greene/Offered every year

#### **HIST228 EARLY MODERN BRITAIN**

This course will cover the major political, economic, cultural, social, religious and intellectual developments in Britain from rise of the Tudor dynasty in the fifteenth century through the eighteenth century, at which time the British Empire dominated world politics. We will pay particular attention to the emergence of modern monarchy, the Protestant Reformations, the English Civil War, the Financial Revolution, and the beginnings of empire. We will examine how the four nations of England, Scotland, Wales and Ireland came to be Britain and how a British identity emerged. We will also examine the relationships between major events and shifts in English society and culture, including the changing roles of women, the increasing dominance of the middle class and its affect on elite society and culture. Ms. Kushner/Offered periodically

#### **HIST230 HISTORY OF THE ARMENIAN GENOCIDE/SEMINAR**

Examines the various dimensions of the Armenian Genocide, through scholarly analyses, survivor narratives, journalistic accounts and other resources. Through the course, students develop a detailed understanding of the actual events of the genocide, its social and political causes, and its immediate and long-term impact on individual Armenians and the Armenian nation generally. Students will also treat in-depth the initial external response to the genocide, its political and legal aftermath, and the significant effort still made by the Turkish successor state to deny that the genocide occurred. Mr. Akcam/Offered periodically

#### **HIST232 FINDING THE SUBJECT: COMPARATIVE HISTORIES OF PROSTITUTION/ SEMINAR**

This seminar will examine prostitution in a variety of places and times. These include medieval, early modern and modern Europe; the United States, Argentina, Russia and China in the 19th century; ancient Rome; and 20th-century Kenya. The goal is twofold. The first is to study how historians find prostitutes in the historical record and what sorts of questions they consequently ask of their evidence. The point is to better understand the ways in which historians can access and make claims about subjects who usually have no voice of their own. The second goal is to pursue a selective, comparative, global history of prostitution. We will endeavor to see the ways in which prostitution was organized, what it meant to those who participated in it, and how it was perceived by those who did not. We will attempt to understand why prostitution, which never engaged more than a fraction of any population at any given time, managed to take on such a fundamental importance in the shaping of ideas about the state, family, women, sexuality, modernity, youth and power. Ms. Kushner/Offered periodically

#### **HIST233 CONFUCIANISM, DAOISM, BUDDHISM: INTELLECTUAL HISTORY OF CHINA/LECTURE, DISCUSSION**

Explores the three major intellectual traditions of China, with special emphasis on the ethical values of each tradition and their historical and contemporary relevance. Fulfills the Values Perspective. Mr. Ropp/Offered every year

#### **HIST234 RACIAL THOUGHT AND BODY POLITICS IN MODERN EUROPE (1500-2000)/SEMINAR**

The category of "race" has been used since about 1500—when Europe's Renaissance met with the exploration of "other" human beings in different continents—to naturalize inequality among groups of people based on certain ideas of their bodies. The seminar focuses on the scientific foundation of modern racism in the Enlightenment, the origins of the cult of health and beauty at about 1900, and the globalization of western body ideals until now. Mr. Kuehne/Offered periodically



**HIST236 GENDER, WAR AND GENOCIDE IN 20TH CENTURY EUROPE/SEMINAR**

The purpose of this course is to investigate the different and often hidden ways gender images and gender regimes shaped the radicalization of mass violence in Germany and Europe in the first half of the 20th century and Europe's conversion to peace from 1945 on. A related question is how these gender images and gender regimes were itself shaped by war and genocide. The course covers WWI and WWII, national differences of war memories, the feminization of the Holocaust, the rise of a peace culture in Europe since the 1980s, and the return of genocide to Europe in former Yugoslavia in the 1990s. Special attention will be paid to various approaches to gender history, such as the analysis of discourses and images, or the analysis of gender practices. We will attempt to do this by critical analysis of scholarly work, written testimonies, literature, films, and propaganda materials. Mr. Kuehne/Offered periodically

**HIST237 THE HOLOCAUST PERPETRATORS**

This course explores the main parts of the German and Central European society that committed the Holocaust, that is the desktop perpetrators like Adolf Eichmann, the physicians who carried used Jews for medical experiments, the concentration-camps guards, and the killing units as the hard core of the SS elite, but also "ordinary" Germans and soldiers who served in police battalions or in the drafted army, on women who served as guards or as part of the occupational regime, and not least on non-German collaborators or volunteers. The course focuses on the interrelation of individual and biographical backgrounds, mental and ideological orientations, and social and institutional arrangements: What are the reasons that made "normal" human becoming mass murderers? Mr. Kuehne/Offered biannually

**HIST238 AMERICA, RUSSIA AND THE COLD WAR 1917-1991**

Previously offered as a broad survey of 20th century U.S. foreign relations, "History 238 Version 2.0" focuses on the Russian-American rivalry at the center of world politics from the Bolshevik Revolution in 1917 through the collapse of the Soviet Union in 1991. Major topics include the escalating nuclear arms race, recurrent crises in Vietnam, Cuba and other parts of the Third World, and important personalities from Harry Truman and Josef Stalin to Ronald Reagan and Mikhail Gorbachev. History 238 has been redesigned to serve as a lead-in for Government 238, "U.S. Foreign Policy," taught by Michael Butler. Mr. Little/Offered periodically

**HIST239 U.S. CONSTITUTIONAL LAW: CIVIL LIBERTIES/LECTURE, DISCUSSION**

See Government and International Relations 272.

**HIST240 U.S. CONSTITUTIONAL LAW: GOVERNMENTAL POWERS/LECTURE, DISCUSSION**

See Government and International Relations 273.

**HIST241 HISTORY OF INTERNATIONAL HUMAN RIGHTS/LECTURE, DISCUSSION**

This course will introduce the student to one of the most fundamental issues in the evolution of societies: human rights. Examines the various conceptions of personal rights since the ancient times. Issues related to the promotion and protection of human rights as premised on the fundamental principles of basic human dignity and individual rights are explored. Examines also the emergence of domestic human rights and the relationship between just society and political legitimacy. Staff/Offered periodically

**HIST243 AMERICAN ANTIQUARIAN SOCIETY SEMINAR IN AMERICAN STUDIES/SEMINAR**

Given at the American Antiquarian Society (about two miles from Clark); students conduct original research in the society's unique holdings. Students apply in the spring through Professor Neuman, English Dept. Offered every year

**HIST247 THE WESTERN POWERS AND THE ARMENIAN GENOCIDE**

This course is a seminar on the Western responses to the Armenian genocide. It surveys problems in international responses to genocides within a comparative perspective, and examines the diplomacy of the Western powers toward the Ottoman Empire and the internationalization of the Armenian Question, followed by the events leading to the Armenian genocide. This course analyzes the instruments and conduct of Western diplomacy – for example, the United States, Great Britain, and Germany – within the context of international geopolitical considerations and the world political economy, as well as their domestic politics as determining their responses to the Armenian genocide. Finally, the course evaluates the Western responses to Armenian demands for international recognition, and to the Turkish denial, of the Armenian genocide. We conclude by assessing the extent to which the Western powers can facilitate Armenian-Turkish reconciliation. Staff/Offered periodically

**HIST253 20TH-CENTURY EUROPE/LECTURE, DISCUSSION**

Deals with Europe in the 20th century and focuses on some of the key social, political and cultural developments in what turned out to be the most disturbing chapter in Europe's long history. Staff/Offered every year

**HIST255 JEWS IN MODERN EUROPE: FROM EXPULSION TO EMANCIPATION/LECTURE, DISCUSSION**

This course examines the evolution of Jewish life in Europe between the age of the Spanish expulsion in the sixteenth century to the age of emancipation in the twentieth. Throughout this period, European Jews not only transformed the meaning of Jewish religious experience and expression, but participated fully in the creation of modern Europe. Examining a variety of primary sources, ranging from Hasidic parables to the writings of Sigmund Freud, we will explore critical issues that animate the writing of European and Jewish history, including the development of the reforming state and civil society, the spread of capitalism and technological change, the impact of nationalism, the explosion of vernacular literature and mass culture, and the challenge of scientific discovery. Ms. Litvak/Offered every year

**HIST260 RESCUE AND RESISTANCE DURING THE HOLOCAUST/SEMINAR**

Investigates rescue and resistance activities during the second World War. Our aim will be to come to a critical understanding of what we mean by "rescue" and "resistance," and to analyze how these undertakings were organized, who participated in them and why people felt compelled to do so. Looks at the role and function (if any) of age, gender, degree of religious observance, political affiliation and social class in our attempts to understand not only what activities were undertaken, but the motivation for such actions. Ms. Dwork/Offered periodically

**HIST261 JEWISH CHILDREN IN NAZI-OCCUPIED EUROPE/SEMINAR**

Jewish children had many different types of living experiences during the war years. The purpose of this course is to study the lives of European Jewish children during and after the occupation years. Studying the youngest and most vulnerable members of society, students will learn about the children themselves and about the adults who framed and shaped their lives. Ms. Dwork/Offered periodically



**HIST265 LIFE AND DEATH IN THE CITY: OCCUPIED EUROPE, 1939-1945/SEMINAR**

Examines the daily lives of ordinary people — gentile and Jewish — in the cities of occupied Europe during WWII. Ms. Dwork, Ms. Pritchard/Offered periodically

**HIST266 REFUGEES/SEMINAR**

The aim of this course will be to investigate and analyze the history of the “Refugee Question” in Europe and America, and to explore the impact of these international and national debates on the lives of the asylum seekers. Ms. Dwork/Offered periodically

**HIST267 RELIGIOUS EXPERIENCE IN THE ANCIENT WORLD/LECTURE, DISCUSSION**

See Classics 267.

**HIST268 SPECIAL TOPICS: MODERN EUROPEAN HISTORY/SEMINAR**

Content and topic vary with instructor. Staff/Offered periodically

**HIST269 TRANSGRESSION AND POLICING: EIGHTEENTH-CENTURY CULTURE AND SOCIETY/SEMINAR**

See English 269.

**HIST270 JEWISH RESPONSES TO MODERNITY: THE ENLIGHTENMENT AND ITS CRITICS/SEMINAR**

Examines the ways in which Jewish thinkers, writers, historians and rabbinic leaders dealt with the tensions attendant on the crisis of modernity that came in the wake of their own confrontation with the social and intellectual values of the Enlightenment and its Jewish variant, the Haskalah, beginning in the late eighteenth century. The struggle with the implications of Enlightenment not only produced the nineteenth century split between the proponents of religious reform and the adherents of orthodoxy, but contributed to the urgency of Jewish politics in the twentieth century, and continues to inform our own on-going debates about the content of secular Jewish culture, the meaning of Jewish ethnicity and the ethical responsibilities of Jewish men and women in the modern world. Ms. Litvak/Offered periodically

**HIST273 LIFE UNDER OCCUPATION/SEMINAR**

Examines life under German occupation critically. The life of Jews under German occupation clearly was different than the life of their gentile neighbors, but what is equally true but not so obvious is the difference in occupation regimes across Europe. To highlight that fact and the embedded issues, the course will focus on Poland, France, Bulgaria, the Netherlands and Denmark. Particular attention will be paid to the history of France, because of the division between the north and south, and the role of Petain and Vichy. Ms. Dwork/Offered periodically

**HIST281 CHINA RISING: THE PEOPLE’S REPUBLIC OF CHINA SINCE 1949/LECTURE, DISCUSSION**

This course explores all aspects of Chinese life from the founding of the People’s Republic of China in 1949 through the harsh reign of Mao Zedong to the reforms of Deng Xiaoping and the dramatic rise of China since the early 1980s. How did the world’s largest country manage to quadruple its economy in the past 25 years? What have been the main continuities and changes in Chinese life since 1949? What are the historical implications of China’s dramatic rise in terms of its society, politics, economics, international relations, and the global environment? Mr.Ropp/Offered every other year

**HIST282 CHINESE WOMEN IN LITERATURE AND SOCIETY/LECTURE, DISCUSSION**

Examines the changing role of women in Chinese society from the 17th century to the present, primarily through the reading and discussion of Chinese literature in English translation. Mr. Ropp/Offered every other year

**HIST285 INTRODUCTION TO AFRICAN-AMERICAN HISTORY, 1865-PRESENT/LECTURE,DISCUSSION**

This course examines the history of African Americans from the Civil War to present day with special emphasis on the ways individuals and organizations challenged racial oppression. Students will examine how black Americans demonstrated a sense of agency within the context of Jim Crow segregation, employment discrimination, and disenfranchisement. Topics include Reconstruction, northern migrations, Ida B. Wells-Barnett and the Women’s Club Movement, Garveyism, Civil Rights and Black Power movements, as well as the advent of African American popular culture. Mr. Power-Greene/Offered periodically

**HIST286 THE VIETNAM WAR/LECTURE, DISCUSSION**

Explores the Vietnam War, emphasizing American involvement in Vietnam in the decade 1965 to 1975. Includes a survey of the history and culture of Vietnam, French experience in Vietnam, and American involvement with Vietnam from World War II to the present. Staff/Offered periodically

**HIST288 SEMINAR IN CHINESE HISTORY/SEMINAR**

Topical research seminar in Chinese history for those with a concentration in Asian Studies. Prerequisite: either HIST080, 181 or 182; or by permission. Mr. Ropp/Offered periodically

**HIST290 POLITICAL DISSENT IN CHINESE HISTORY/SEMINAR**

Explores traditions of political dissent in China through the entire sweep of Chinese history from the 4th century BCE to the present. Focuses on political power holders and intellectuals who in one way or another challenged their power by issuing criticisms, by protesting their policies, criticizing their characters, or by refusing to serve under them. Mr. Ropp/Offered periodically

**HIST293 AFRICAN AMERICAN SOCIAL AND POLITICAL MOVEMENTS/LECTURE, DISCUSSION**

This course will examine the African American struggle against social and political oppression in America during the nineteenth and twentieth centuries. Specifically, students in this course will explore black American involvement in the Antislavery Movement, the Women’s Club movement, the Harlem Renaissance, Anti-colonial activities, and the rise and fall of the Black Power and Black Arts Movement of the 1960s and 1970s. By the end of the course, students will understand how black-led organizational efforts helped to transform America’s social and political landscape. Mr. Power-Greene/Offered bi-annually

**HIST295 DANGEROUS WOMEN/SEMINAR**

This course will explore the history of dangerous women from Bible through the present, concentrating most heavily on early modern Europe. We will focus primarily on England, France and Germany (though occasionally we will draw on scholarship about the U.S. and other regions). We will examine discourses of dangerous women developed in religious writings, myth, literature and fairy tales, medicine, crime reporting, social science and legal texts in order to interrogate the very concept of the dangerous woman and ask why certain women at certain times were considered dangerous. We will also look at the

experiences and treatment of women labeled dangerous specifically examining saints, heretics, prostitutes, witches, step-mothers, queens, lesbians, criminals, mentally-ill women and women's rights activists. Ms.Kushner/Offered periodically

**HIST297 HONORS THESIS RESEARCH**

Honors students receive up to two credits for thesis research. Offered for variable credit. Staff/Offered every year

**HIST299 SEC. 1 DIRECTED STUDY/TUTORIAL**

Undergraduates, normally juniors and seniors, construct an independent study course on a topic approved and supervised by an instructor. Prerequisite: permission of instructor. Offered for variable credit. Staff

**HIST300 READINGS IN AMERICAN COLONIAL HISTORY/TUTORIAL**

**HIST301 STUDIES IN THE AGE OF THE AMERICAN REVOLUTION/LECTURE, DISCUSSION**

See History 201.

**HIST302 THE EARLY AMERICAN REPUBLIC/LECTURE, DISCUSSION**

See History 202.

**HIST304 SPECIAL TOPICS IN U.S. HISTORY: AMERICAN SOCIAL HISTORY/ PROSEMINAR**

See History 204.

**HIST305 RENAISSANCE AND REFORMATION/LECTURE, DISCUSSION**

See History 205.

**HIST306 AFRICANS IN THE AMERICAS, 1500-1888/LECTURE, DISCUSSION**

See History 206.

**HIST307 EXPLORATIONS IN HISTORY: RURAL NEW ENGLAND IN THE 19TH CENTURY**

See History 207.

**HIST309 U.S. HISTORY SINCE WORLD WAR II/LECTURE, DISCUSSION**

See History 209.

**HIST310 RESEARCH SEMINAR IN 19TH-CENTURY AMERICAN HISTORY/SEMINAR**

See History 210.

**HIST311 AMERICAN CONSUMER CULTURE/SEMINAR**

See History 211.

**HIST312 HISTORY OF SEXUALITY: 1750 TO THE PRESENT/LECTURE, DISCUSSION**

See History 212.

**HIST313 GENDER AND THE CITY IN THE UNITED STATES/SEMINAR**

See History 213.

**HIST314 THE AMERICAN CIVIL WAR/LECTURE, DISCUSSION**

See History 214.

**HIST315 THE AGE OF LINCOLN/PROSEMINAR**

See History 215.

**HIST316 EARLY AMERICA /PROSEMINAR**

See History 216.

**HIST317 RECONSTRUCTION: AMERICA AFTER THE CIVIL WAR, 1865-1877/SEMINAR**

See History 217.

**HIST319 HISTORY OF AMERICAN WOMEN/LECTURE, DISCUSSION**

See History 219.

**HIST322 HISTORY OF THE SOUTH/LECTURE, DISCUSSION**

See History 222.

**HIST323 THE CIVIL RIGHTS MOVEMENT/LECTURE, DISCUSSION**

See History 223.

**HIST326 COMPARATIVE COLONIALISM/SEMINAR**

See History 226.

**HIST327 THE CARIBBEAN IN THE ERA OF SLAVERY, 1492-1886/LECTURE, DISCUSSION**

See History 227.

**HIST329 WOMEN IN EUROPEAN HISTORY/LECTURE, DISCUSSION**

See History 229.

**HIST331 AMERICA IN THE GILDED AGE, 1877-1900/ PROSEMINAR**

See History 231.

**HIST335 THE ATLANTIC WORLD/LECTURE, DISCUSSION**

See History 235.

**HIST338 AMERICA, RUSSIA, AND THE COLD WAR, 1917-1991/LECTURE, DISCUSSION**

See History 238.

**HIST342 HISTORY OF NATIONALISM/LECTURE, DISCUSSION**

See History 242.

**HIST348 HISTORY OF THE MIDDLE EAST/SEMINAR**

See History 248.

**HIST352 THE BRITISH EMPIRE/LECTURE, DISCUSSION**

See History 252.

**HIST354 THE AGE OF ATLANTIC REVOLUTIONS/SEMINAR**

See History 254.

**HIST383 STUDIES IN CHINESE HISTORY/TUTORIAL**

**HIST392 THESIS RESEARCH**

See History 392.

**HIST394 GRADUATE RESEARCH SYMPOSIUM**

See History 394.

**HIST397 MASTER'S THESIS**

See History 397.

**HIST398 DOCTORAL DISSERTATION**

See History 398.

**HIST399 GRADUATE READINGS**

See History 399.

**JS117 READING THE NARRATIVES OF THE HEBREW BIBLE/FIRST-YEAR SEMINAR**

See Jewish Studies 117.

**JS150 JERUSALEM IN HISTORY AND IMAGINATION/LECTURE, DISCUSSION**

See Jewish Studies 150.

**JS174 THE JEWISH EXPERIENCE/LECTURE, DISCUSSION**

See Jewish Studies 174.

**SOC232 POPULATION, ENVIRONMENT AND DEVELOPMENT/VARIABLE FORMAT**

See Sociology 232.



## INNOVATION AND ENTREPRENEURSHIP

### Program Faculty

Barbara Bigelow, Ph.D.

Priscilla Elsass, Ph.D.

George Gendron

### Adjunct Faculty

Katya Fels Smyth, A.B.

David Jordan, D.H.A.

Robert Sigel, M.B.A.

### Program Overview

This exciting new minor is open to all students in any major. The minor consists of six courses designed to provide students an opportunity to merge their passion with an ability to make that passion economically sustainable as they plan their careers. The mission of this program is to provide a set of rigorous entrepreneurial experiences for undergraduate liberal arts and science students, shaping graduates who are economically literate, and have explored and participated in the process of starting something new. The required courses dramatically broaden awareness of the opportunities after graduation, allowing students to be better prepared to take responsibility for their own professional and economic destiny. For additional information, please contact the GSOM Program Manager at (508)793-7744.

### Innovation and Entrepreneurship Minor

The Innovation and Entrepreneurship minor requires six courses. Students must have a cumulative GPA of 2.0 in the minor courses to complete the minor. It is recommended that students declare the minor by the end of their sophomore year. It should be noted that the capstone course ENT265 is required of all minors. A secondary capstone, ENT266, is offered for those whose projects are deemed launchable by the program director. Although this course is not required, students are strongly encouraged to take it and should plan their schedules accordingly.

#### Required Courses:

- ENT100 The Art and Science of Management
- ENT215 The Art of the New-Entrepreneurship
- ENT202 Entrepreneurial Communication
- ENT210 Management and Behavioral Principles
- ENT265 Entrepreneurship Capstone Project Seminar I

#### One Elective:

- ENT245 Social Entrepreneurship
- ENT255 Navigating Nonprofit Dilemmas to Create Social Change
- ENT266 Entrepreneurship Capstone Project, Seminar II

#### Elective (preapproved by program director)

The elective should substantially support a student's capstone project. The elective may not count toward a student's major or any other minor or concentration. ENT245, 255 or 266 may count as the minor elective. Students may also choose an elective from other Clark academic departments with approval from the program director.

### Courses

#### ENT100 THE ART AND SCIENCE OF MANAGEMENT

See Management 100.

#### ENT202 ENTREPRENEURIAL COMMUNICATION AND INFLUENCE

The goal of this course is to explore the role of persuasion and influence (rhetoric) as practiced in early stage entrepreneurial organizations, both in for-profit and non-profit organizations. Creating and

communicating a compelling vision is arguably a critical life skill.

Entrepreneurs must be able to effectively communicate their vision to a wide variety of audiences. Moreover, in today's marketplace, entrepreneurs must be prepared to communicate in persuasive ways on a global scale. Through intensive classroom work, role playing, and real-world applications, students will explore and participate in transactional, relational, solution, and value-added persuasion. Staff/Offered every semester.

#### ENT210 MANAGEMENT AND BEHAVIORAL PRINCIPLES

See Management 210.

#### ENT215 THE ART OF THE NEW - ENTREPRENEURSHIP

See Management 215.

#### ENT245 SOCIAL ENTREPRENEURSHIP

See Management 245.

#### ENT255 NAVIGATING NONPROFIT DILEMMAS TO CREATE SOCIAL CHANGE

See Management 255.

#### ENT258 PUBLISHING IN THE 21ST CENTURY

See Management 258.

#### ENT265 ENTREPRENEURSHIP CAPSTONE PROJECT SEMINAR I

Every student who elects the minor, or the track in the Innovation & Entrepreneurship Program will be expected to complete a project before graduation. Projects may be done by an individual student, or as a member of a team. This element of the program will promote idea generation, team formation and project management skill, primary and secondary research, market analysis and industry mapping. This course is required for all Innovation and Entrepreneurship minors or tracks. Staff/Offered every semester

#### ENT266 ENTREPRENEURSHIP CAPSTONE PROJECT SEMINAR II

Students who plan to execute the project formulated in ENT265 should plan to take the second seminar, 266. Students may work as individuals or in a group. Students will be expected to have made connections (as appropriate for the project) with suppliers, distributors, subcontractors, and legal advisors. Exploration of legacy projects will be covered and students will be required to create a final report that documents their plans for or execution of the project launch. This course is optional for Innovation and Entrepreneurship minors or tracks. Staff/Offered every spring

## INTERNATIONAL DEVELOPMENT, COMMUNITY AND ENVIRONMENT

The Department of International Development, Community, and Environment (IDCE) houses four graduate and two undergraduate programs at Clark University.

#### Graduate Programs:

- International Development and Social Change
- Community Development and Planning
- Environmental Science and Policy
- Geographic Information Sciences for Development and Environment

#### Undergraduate Programs:

- International Development and Social Change
- Environmental Science and Policy track within the Environmental Science major

In addition, IDCE offers accelerated BA/MA degrees in International Development and Social Change, Environmental Science and Policy, and Community Development and Planning to qualified Clark students.

The IDCE Department stresses an interdisciplinary approach linking geography, anthropology, the environmental sciences, economics, government and history. Divisions between disciplines are crossed as students take advantage of courses in the different programs. They develop a multidimensional perspective that is critical to tackling the complex challenges of sustainability, community building and policy making.

For more information, visit IDCE at [www.clarku.edu/idce](http://www.clarku.edu/idce).

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## INTERNATIONAL DEVELOPMENT AND SOCIAL CHANGE

### Program Faculty

Ellen Foley, Ph.D. - *Coordinator*

Kiran Asher, Ph.D.

David Bell, Ed.D.

Anita Häusermann Fábos, Ph.D.

Jude Fernando, Ph.D.

William Fisher, Ph.D.

Liza Grandia, Ph.D.

Heidi Larson, Ph.D.

Ken MacLean, Ph.D.

### Adjunct Faculty

Parminder Bhachu, Ph.D.

Joseph de Rivera, Ph.D.

Jody Emel, Ph.D.

Odile Ferly, Ph.D.

Jacqueline Geoghegan, Ph.D.

Beverly C. Grier, Ph.D.

Amy Ickowitz, Ph.D.

Douglas Johnson, Ph.D.

Laurence A. Lewis, Ph.D.

James T. Murphy, Ph.D.

Richard Peet, Ph.D.

Paul W. Posner, Ph.D.

Dianne Rocheleau, Ph.D.

Paul Ropp, Ph.D.

Srinivasan Sitaraman, Ph.D.

Valerie Sperling, Ph.D.

B. L. Turner, Ph.D.

Kristen Williams, Ph.D.

### Department Instructors

Ruth Allen, M.A.

George Heaton, J.D.

Elisa Martinez, M.A.

Laura Roper, Ph.D.

### Affiliate Faculty

Donna Hicks, Ph.D.

### Research Faculty

Cynthia Enloe, Ph.D.

Richard Ford, Ph.D.

Barbara Thomas-Slayter, Ph.D.

## Program Overview

In the International Development and Social Change program, students learn from people who are actively engaged in vital world issues, for example, globalization, nationalism, displacement of indigenous people in India, food scarcity in Ethiopia, black social movements in Colombia, and social justice and education in South Africa. The program begins by building a foundation to help students to understand and think critically about the social, political, economic and cultural dynamics shaping the world. Courses provide important insights on how the developed and developing worlds are linked historically and at present. Clark University is one of the few universities in the nation to offer a liberal-arts major in international development and social change.

Beyond the classroom—in workshops, panels, and informal gatherings—international development and social change majors learn from faculty and graduate students with field experience from around the world. Students have the opportunity to expand this knowledge with hands-on experience through internships and field research.

As a major in this program, you will be part of a diverse student body and discover a program that offers intellectual excitement, insightful perspectives and stimulating ideas. International development and social change students explore strategic political action by developing an awareness of the complexities and contradictions of global power relations. You will learn the history of social change around the world from professors who have been involved in social change in Asia, South America and Africa. Students in this major become thinkers and doers who are prepared to tackle the challenges of development in the 21st century.

## Undergraduate Requirements

### Course of Study

The major in International Development and Social Change (IDSC) requires 14 units, as follows:

- 1. Core Courses (5 units):** ID 125 Tales from the Far Side: Development and Underdevelopment; ECON 128 Development Economics or an equivalent economics course; and three additional core courses (one each) in politics of development, resource management, and socio-cultural issues.
- 2. Area of Specialization (4 units):** With approval of their advisors, students select a specialization—such as community-based development, political economy, conflict and development, culture and development, resource management, or gender and development. A minimum of two of these courses must be at the 200-level.
- 3. Methods and Skills Courses (3 units):** ID 132 Research Methods and two courses from the following: computer science, cultural anthropology, cartography, statistics, geographic information systems (GIS), conflict negotiation, or a foreign language at the intermediate level.
- 4. Internship or Field Research (1 unit):** A one-credit internship or field research related to international development. This may be combined with a Study Abroad Program.
- 5. Capstone Seminar (1 unit) or Honors Thesis (2 units):** ID 290 Capstone Seminar is taken by all IDSC majors in the fall of their senior year. Students will complete a research project on the topic of their choice related to their specialization. Students doing a



Senior Thesis will begin their thesis in the Capstone Seminar and complete it in the spring of their senior year under the supervision of their thesis advisor.

### Grading for the Major

The lowest acceptable grade for all IDSC major courses is a C- to have it count toward the major. You may NOT take any IDSC major courses for Pass/No Record. The internship is the only exception. You may take internship credits on a CR/NC basis. To take an internship for a letter grade, you must petition the Dean of the College.

### The Double Major

Many students double major in IDSC and related departments, such as economics, geography, government (especially international relations), psychology, and sociology. A major in IDSC and a minor in one of the related departments or programs, such as women's studies, is another popular option. Note that up to two courses are open for counting toward both majors.

### Honors Program

The honors program in International Development and Social Change provides advanced students with an opportunity to carry out independent research on an issue of his or her interest. To graduate with honors, you must conduct and successfully complete a two-semester independent honors thesis or project on a topic of relevance in the field of international development.

The honors program is required for students wishing to apply to the international development and social change B.A./M.A. program and is open to juniors who:

1. Have a minimum grade-point average of 3.25 overall and 3.5 in the international development major by the end of the first semester of the junior year
2. And demonstrate that they are able to undertake independent research on a topic relevant to the major.

If you wish to be admitted to the honor's program in IDSC, but do not meet the above eligibility criteria, you may petition the director of the IDCE Department.

### Minor

This minor consists of six courses, four of which focus on a development theme identified by the student and approved by his/her adviser. The six include one introductory course (ID120, ID125 or ID131), two 100-level courses, two 200-level courses, and one skills course from among those accepted for the IDSC major. No more than two courses can be an internship or directed study. They will be assessed for equivalence to the 100- or 200-level courses.

### Accelerated Degree Program

International Development and Social Change offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

### Courses

#### **BIOL201 ECOLOGY OF ATLANTIC SHORES/LECTURE, FIELD TRIP**

See Biology 201.

#### **BIOL216 ECOLOGY/LECTURE, LABORATORY**

See Biology 216.

#### **BIOL217 ECOLOGY OF INFECTIOUS DISEASE/SEMINAR**

See Biology 217.

#### **BIOL302 APPLIED ECOLOGY**

See Biology 302.

#### **ECON128 INTRO TO ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION**

See Economics 128.

#### **ECON247 ECONOMICS OF POPULATION/LECTURE, DISCUSSION**

See Economics 247.

#### **EN120 DISCOVERING ENVIRONMENTAL SCIENCE/ LECTURE, DISCUSSION**

See Environmental Science 120.

#### **EN207 CLIMATE CHANGE, ENERGY AND DEVELOPMENT**

See Environmental Science 207.

#### **EN235 GIS & LAND CHANGE SCIENCE**

See Environmental Science 235.

#### **EN241 ENVIRONMENTAL TOXICOLOGY/LECTURE, DISCUSSION**

See Environmental Science 241.

#### **EN256 RESEARCH SEMINAR IN DYNAMIC ENVIRONMENTAL MODELING**

See Environmental Science 256.

#### **EN265 RISK ANALYSIS: POLICY AND METHODS/1/2 CREDIT/SEVEN WEEK MODULE**

See Environmental Science 265.

#### **EN276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION**

See Government and International Relations 276.

#### **EN282 MANAGEMENT OF ENVIRONMENTAL POLLUTANTS/SEMINAR**

See Environmental Science 282.

#### **GEOG237 FEMINISM, NATURE AND CULTURE/ SEMINAR**

See Geography 237.

#### **GEOG247 INTERMEDIATE QUANTITATIVE METHODS IN GEOGRAPHY/LECTURE, LABORATORY**

See Geography 247.

#### **GEOG250 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT/SEMINAR**

See Geography 250.

#### **GEOG255 QUALITATIVE RESEARCH METHODS, SKILLS AND APPLICATIONS/LECTURE, DISCUSSION**

See Geography 310.

#### **GEOG256 GLOBAL ECONOMIC GEOGRAPHIES/SEMINAR**

See Geography 256.

#### **GEOG263 THE CLIMATE SYSTEM AND GLOBAL ENVIRONMENTAL CHANGE/ LECTURE, DISCUSSION**

See Geography 263.

#### **GEOG271 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION**

See Geography 271.

#### **GEOG281 TROPICAL ECOLOGY/LECTURE, DISCUSSION**

See Geography 281.

#### **GEOG290 DIRECTED RESEARCH: NASA UAV PROJECT**

See Geography 290.

#### **GOVT102 POLITICAL SCIENCE FICTION/FIRST-YEAR SEMINAR**

See Government and International Relations 090.

#### **GOVT103 AFRICA AND THE WORLD/LECTURE, DISCUSSION**

See Government and International Relations 103.

#### **GOVT117 REVOLUTION AND POLITICAL VIOLENCE/LECTURE, DISCUSSION**

See Government and International Relations 117.

**GOVT177 TRANSITIONS TO DEMOCRACY/LECTURE, DISCUSSION**

See Government and International Relations 177.

**GOVT208 COMPARATIVE POLITICS OF WOMEN/LECTURE, DISCUSSION**

See Government and International Relations 208.

**GOVT218 CHILD LABOR AND GLOBALIZATION/SEMINAR**

See Government and International Relations 218.

**GOVT227 GLOBAL POLITICS OF DEVELOPMENT/LECTURE, DISCUSSION**

See Government and International Relations 227.

**GOVT240 HUMAN RIGHTS AND INTERNATIONAL POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 240.

**GOVT283 GLOBAL AIDS: THE PANDEMIC IN COMPARATIVE PERSPECTIVE/SEMINAR**

See Government and International Relations 283.

**GOVT289 ADVANCED TOPICS IN INTERNATIONAL RELATIONS/SEMINAR**

See Government and International Relations 289.

**HIST077 INTRODUCTION TO LATIN-AMERICAN CIVILIZATION/LECTURE, DISCUSSION**

See History 077.

**HIST084 JAPANESE CIVILIZATION/LECTURE, DISCUSSION**

See History 084.

**HIST181 CHINESE CIVILIZATION/LECTURE, DISCUSSION**

See History 181.

**HIST182 MODERN CHINA/LECTURE, DISCUSSION**

See History 182.

**HIST184 MODERN JAPAN/LECTURE, DISCUSSION**

See History 184.

**HIST272 ADVANCED TOPICS ON LATIN AMERICA: MANY MEXICOS/RESEARCH SEMINAR**

See History 272.

**HIST281 CHINA RISING: THE PEOPLE'S REPUBLIC OF CHINA SINCE 1949/LECTURE, DISCUSSION**

See History 281.

**HIST282 CHINESE WOMEN IN LITERATURE AND SOCIETY/LECTURE, DISCUSSION**

See History 282.

**HIST288 SEMINAR IN CHINESE HISTORY/SEMINAR**

See History 288.

**ID011 MAKING A DIFFERENCE/FIRST-YEAR SEMINAR**

This course will offer a scholarly perspective on "making a difference," with two emphases: youth involvement in social change, and the university partnership approach to community development. Themes of personal growth, leadership, collaboration, and activism will be explored. Students will learn how to "make a difference" at various levels: in their lives, on the Clark campus, and in the city of Worcester. This is a multi-disciplinary course in which readings will be derived from the fields of sociology, psychology, community development, urban studies, education, social policy, and political science. In addition to reflection papers and discussions, students will complete interviews with community leaders, take leadership roles in on-campus activities, and have a community placement in the Main South or Piedmont neighborhood. The concluding assignment will be a propos-

al for a summer Making a Difference project, or another community-based social change activity. Fulfills the Values Perspective requirement. Ms. Ross, Ms. Boyle. Offered fall semester

**ID016 INTRODUCTION TO ECONOMIC GEOGRAPHY/LECTURE, DISCUSSION**

See Geography 016.

**ID052 GLOBAL CHANGE, REGIONAL CHALLENGES**

See Geography 052.

**ID069 INTRODUCTION TO INTERNATIONAL RELATIONS/LECTURE, DISCUSSION**

See Government and International Relations 069.

**ID070 INTRODUCTION TO COMPARATIVE POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 070.

**ID087 INTRODUCTION TO ENVIRONMENTAL INFORMATION SYSTEMS/LECTURE, LABORATORY**

See Geography 087.

**ID101 INTRODUCTION TO PEACE STUDIES/LECTURE, DISCUSSION**

See Peace Studies 101.

**ID107 MIRACLES OF ASIA: ECONOMIC GROWTH IN GLOBAL CONTEXTS/LECTURE, DISCUSSION**

See Geography 107.

**ID109 INTERNATIONAL ECONOMICS: TRADE AND FINANCE/LECTURE, DISCUSSION**

See Economics 108.

**ID110 INTRODUCTION TO QUANTITATIVE METHODS/LECTURE, LABORATORY**

Introduces the most standard methods of statistical analysis, which are essential for serious research. Considers data sampling and descriptive and inferential statistical techniques for analyzing geographic data. Includes graphic techniques, tests of hypotheses and regression. Students use computer spreadsheets for statistical analysis. No prior exposure to statistics is assumed. The course is one for which graduate students may receive credit. A skills course for geography majors. Fulfills the Formal Analysis requirement. Mr. Pontius, Staff/Offered every year

**ID112 LEADING ISSUES IN SUSTAINABLE DEVELOPMENT**

This course explores the connections between the theory and practice of sustainable development. It draws from political economics, political ecology and human geography. The course also highlights the issues of power and the obstacles they present to the achievement of the objectives of sustainable development. Mr. Fernando/Offered every year

**ID120 INTRODUCTION TO CULTURAL ANTHROPOLOGY/LECTURE, DISCUSSION**

The purpose of this course is to provide students with a rich anthropological understanding of culture. What does it mean to be human across our many differences and similarities? How do people give meaning to their lives across time and space? How are some of the most intimate features of our lives socially patterned? Students will learn to see the familiar in the strange and the strange in the familiar—in other words to appreciate something about other cultures and, through this mirror, to learn something new about their own. The class also provides an introduction to anthropological history, ethnographic method, and social theory. From the U.S. suburbs to hunter-gatherers in the Amazon, students will explore the diversity of human societies around the world through the lens of critical issues such as development, power, identity, war, globalization, inequality, and cultural survival in the twenty-first century. Through class assignments, students will also have the opportunity to use tools of anthropological



observation and problem-solving. Throughout the semester, we will discuss the politics and practicality of applying anthropological knowledge for a more just world. Ms. Grandia

**ID125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT/LECTURE, DISCUSSION**

Discussions of geopolitics invariably refer to the problems of Third World (under) development. What is so compelling about the idea of development? Why does it ail much of the so-called Third World? What are some of the solutions to development dilemmas—neoliberal market reforms or attention to women, ethnic groups and other heretofore marginal issues such as the environment? Or is the development enterprise fundamentally flawed as some postcolonial scholars claim? This course introduces students to key histories, concepts and debates in international development through critical and analytical engagements with fiction, films and theoretical literatures on the subject. Offered every year

**ID126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION**

See Geography 126.

**ID127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE**

See Geography 127.

**ID131 LOCAL ACTION, GLOBAL CHANGE/LECTURE, DISCUSSION**

Introduces students to activism in a broad sense: as both a tool for political action and a mechanism for social and/or economic change. International and community development are discussed as forms of activism. Texts focus on activism not only as it is understood and practiced in the United States, but also as it is found in other parts of the world. This includes grassroots movements against the establishment of dams in India and transnational networking of environmental, women's-rights and human-rights activists. In addition, globalization is considered from an activist perspective—both positive and negative approaches to globalization are examined. Religious-based terrorism is also considered as a form of extreme activism, which is in many ways a reaction to perceived injustice, oppression and lack of alternatives. Students participate in a project at the community or wider level in order to learn about how activism works practically. Students will experience first-hand the opportunities and challenges to affecting change, protecting human rights or raising public awareness. Mr. Bell/Offered every year

**ID136 SUB-SAHARAN AFRICA: ISSUES AND PROBLEMS/LECTURE, DISCUSSION**

See Government and International Relations 136.

**ID137 RACE AND ETHNICITY ACROSS BORDERS: COMPARING THE LOCAL AND GLOBAL**

See Sociology 137.

**ID138 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION**

See Geography 136.

**ID140 FRANCOPHONE LITERATURE AND FILM**

See French 140.

**ID155 THE ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT/LECTURE**

See Economics 157.

**ID161 GLOBAL CULTURES AND IDENTITIES/LECTURE, DISCUSSION**

See Sociology 160.

**ID172 ISLANDS IN THE STREAM: PUERTO RICO AND THE FRENCH ANTILLES**

See Comparative Literature 174.

**ID173 INTRODUCTION TO LATIN-AMERICAN POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 173.

**ID174 GLOBAL ENVIRONMENTAL JUSTICE/ LECTURE, DISCUSSION, FIRST-YEAR SEMINAR (IN ALTERNATE YEARS)**

See Geography 179.

**ID180 INTERNATIONAL ORGANIZATIONS**

See Government and International Relations 180.

**ID184 NOMADS TO OIL SHEIKHS: THE NEW GEOGRAPHY OF THE MIDDLE EAST/LECTURE, SEMINAR**

See Geography 184.

**ID186 SOUTH AFRICA: HISTORY AND CONTEMPORARY POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 178.

**ID190 RASTER GIS/LECTURE, LABORATORY**

Introduces GIS as a data management, analysis and mapping tool. Topics include GIS data structure and management, geodesy and map projections, techniques for raster and spatial database Development. Laboratory exercises concentrate on applying concepts presented in lectures using Idrisi software. While students gain a working knowledge of software application, the focus of the course is on analytical concepts that are fundamental for any spatial analysis using any GIS software. Although the course is computer oriented, no programming is involved. Graduate students may receive credit for this course. A formal-analysis course. Counts as skills course or core course in mapping sciences/spatial analysis in geography major. Staff/Offered every semester

**ID192 POLITICAL ECONOMY OF ASIA**

See Government and International Relations 192.

**ID202 THE HIV/AIDS CRISIS IN AFRICA**

See Government and International Relations 201.

**ID204 INTERNATIONAL AND COMPARATIVE ANALYSIS OF COMMUNITY DEVELOPMENT**

Cities and communities have become more interconnected through global networks of production and information, blurring the boundaries between the so-called First and Third Worlds. Pockets of extreme poverty are found in the wealthiest cities, and pockets of luxurious housing are found in the poorest cities. Similar development challenges take place across international boundaries, such as the inability to house growing populations, proliferation of global consumption fueled by international media, or scarce water resources. In this context of increasing global interaction and similar development challenges, communities have developed distinct places based on their local institutional and economic resources. This course explores how communities are created and transformed through specific case studies from the Americas, Asia and Europe. It includes discussions on urban space in an era of information technology, major community-development trends, and planning approaches. This course seeks to provide (1) general knowledge on the social processes that shape spatial patterns and (2) practical tools for the analysis of communities as intersections of multiple social processes. Fulfills the global perspective. Ms. Chion/Offered every year

**ID206 PEASANTS, RURAL DEVELOPMENT AND AGRARIAN CHANGE**

Throughout history, outsiders have long tried to "fix" the peasantry—stereotyping them from poor and plodding to cunning and rebellious. Who are these ambiguous rural folk? And what is wrong with them? As the course will show, debates about the category of "peasants" often

reflect deeper questions about the nature of capitalism, colonialism, the nation-state, rural development, and even modernity itself. The course begins with foundational texts in anthropology, and political economy attempting to define "peasants" and the unique logic of their "moral economy". Later thematic topics include: gender and farm labor; the Green Revolution and the environment; rebellions and revolts; indigeneity; the commons and commodification; agricultural policy and transnational trade; land reform; NGO mobilization; "local food" and back-to-the-land movements. As an interdisciplinary seminar, students will have the opportunity to read ethnographies, histories, and socio-economic analyses with a broad geographic scope. We will also discuss how all these academic debates influence rural development policy and practice. Ms. Grandia

**ID209 BEYOND VICTIMS AND GUARDIAN ANGELS: THIRD WORLD WOMEN, GENDER AND DEVELOPMENT/SEMINAR**

How did Third World women and gender concerns enter economic development discourses? How have Third World women and gender been conceptualized within development practices? In turn, how have feminist theories about women and gender shaped economic development discourses? In exploring these issues this graduate seminar will eschew the divide between theory and praxis that plagues development literature. Ms. Asher/Offered every year

**ID210 INTERNATIONAL COOPERATION**

See Government and International Relations 211.

**ID213 LATIN AMERICAN POLITICS/LECTURE, DISCUSSION**

An introduction and an overview of the key economic and political issues confronting Latin America today: economic development and social inequality, international debt, the breakdown of democracies as well as transitions from authoritarian rule, revolutions, and the role of working-class, women's, peasant and ethnic movements. We will draw on the analytical perspectives of political economy and cultural politics to develop a nuanced and self-reflexive understanding of the complex realities of Latin-American politics. Ms. Asher/Offered periodically

**ID214 APPLYING ANTHROPOLOGY: FROM FIELD WORK TO ACTION**

This course introduces the field of applied anthropology and exposes students to what practicing anthropologists do, at home and abroad, including the areas of community development, health, agriculture, education, law and human rights, gender, microeconomics, advocacy, policy, language and culture. It explores how concepts in anthropology translate into action, and how an anthropological perspective on development is not only critical of its past, but insightful about its future. Much of the specific case material examined will be associated with areas in Latin America and the US-Mexico border where the instructor has worked, and the course will serve as excellent preparation for students planning to do field work. (1/2 unit, second half Spring) Staff/Offered every year

**ID215 COMPARATIVE ENVIRONMENTAL POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 216.

**ID217 INTERNATIONAL POLITICAL ECONOMY**

See Government and International Relations 226.

**ID219 POLITICS AND DEVELOPMENT IN SOUTHERN AFRICA/SEMINAR**

See Government and International Relations 219.

**ID221 EDUCATION AND DEVELOPMENT/SEMINAR**

Education (formal, non-formal and informal) has played a strategic role in shaping society over the past century, and continues to inform development at the community, national and international levels. This course examines the historical evolution of education and explores its continued local and global relationship to the process of international and community development. Mr. Bell/Offered every year

**ID222 ECONOMY AND ENVIRONMENT/LECTURE, DISCUSSION**

See Geography 224.

**ID228 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION**

See Economics 228.

**ID230 AFRICA'S DEVELOPMENT IN GLOBAL CONTEXT**

See Geography 274.

**ID231 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION**

See Geography 232.

**ID234 THE AGE OF ATLANTIC REVOLUTIONS/SEMINAR**

See History 254.

**ID235 TRAFFICKING: GLOBALIZATION AND ITS ILLICIT COMMODITIES**

Trafficking: Globalization and Its Illicit Commodities. This course turns a critical eye towards the different cultural, political, and economic processes that make contemporary forms of "trafficking" possible. It examines these transnational processes from three different vantage points, each composing one part of the course as a whole. Part one will engage many of the key concepts that inform the existing literature on "trafficking" (e.g. commodification, shadow economies, transnational criminal networks, and regulatory authority) to explore both their assumptions and their limits. Special attention is focused on the ways scholars, policymakers, and activists have historically constructed trafficking as a "problem" either for analysis or action, and how the different legal and policy frameworks created to combat it have changed over recent decades. Part two examines the above concerns in greater detail through a series of case-studies on different forms of human trafficking, the global market for organs, genetic information, animal parts, and endangered species, among others. Part three will consider some of the opportunities and dilemmas (theoretical, methodological and ethical) such practices present for those who wish to study, to manage, or to advocate on behalf of those affected by different forms of trafficking. Mr. MacLean/Offered every year

**ID236 THE ATLANTIC WORLD/LECTURE, DISCUSSION**

See History 235.

**ID237 PROGRAM EVALUATION FOR YOUTH AND COMMUNITY DEVELOPMENT INITIATIVES**

This course provides students with skills required to apply research methods to the assessment of youth and community development programs. By gaining exposure to the various types of program evaluation (e.g. process evaluation, impact evaluation, empowerment evaluation, etc.), analyzing evaluation case studies, and working on an actual evaluation of a program. Students will leave this class with an understanding of the importance of and challenges involved in conducting high quality program evaluations. Students will gain enough skill to assist in the development and implementation of evaluations. Ms. Ross/Offered every other year

**ID238 INTERNET GEOGRAPHY: SOCIOECONOMIC IMPACTS OF INFORMATION TECHNOLOGIES/LECTURE, DISCUSSION**

See Geography 257.



**ID243 SEEING LIKE A HUMANITARIAN AGENCY**

Since World War II, several different but overlapping regimes have emerged to help structure humanitarian responses to large-scale forms of displacement. In what ways do these evolving regimes enable humanitarian agencies to “see,” and in what ways does their particular field of vision differ from that of states, academics, policymakers and the displaced themselves? What kinds of blind-spots (theoretical, methodological, and ethical) inevitably result? This seminar will explore these questions from three different vantage points, each composing one part of the course as a whole. Part one will provide an overview of the literature and the main concepts of the course. Special attention is focused on the ways scholars and policymakers have historically constructed displacement as a “problem” either for analysis or action, and how these concerns have shifted over the past three decades. Part two will consist of ethnographic studies of humanitarian interventions in different geographic settings, which will highlight the relevance (and limits) of concepts and methods drawn from the social sciences, including anthropology. Part three will address some of the opportunities and dilemmas humanitarian emergencies present for those who wish to study or to manage them. Mr. Mclean/Offered every year

**ID245 CULTURE, POLITICS, AND INTERNATIONAL DEVELOPMENT/LECTURE, DISCUSSION**

Examines the interplay of culture and politics with international-development practices in an era of increasing globalization. Designed to encourage students to explore recent insights into the workings of discourse and power, and to examine how we can relate, in both theory and practice, these insights to processes of development and resistance to development in the Third World. Considers specific cases and historical processes to understand the effects on local communities of specific development interventions. Mr. Fisher/Offered periodically

**ID248 GENDER AND HEALTH**

IDCE30248/ID248 - This course introduces students to social science perspectives on the intersection of gender and health. In the course we will examine theoretical approaches to gender and health, such as feminist and political economic perspectives, and explore historical and contemporary case studies that analyze particular dimensions of gender, health, and sexuality. We will explore health issues such as health disparities along lines of gender, race and class, the regulation of reproductive health by nation-states and the “development industry”, and political and social struggles for reproductive rights. We will also consider some dimensions of gender and occupational health, and contemporary health challenges such as gender violence and HIV/AIDS. These issues will be explored mainly in the context of developing countries with some cases drawn from the United States.

**ID249 THE FRENCH-SPEAKING WORLD/LECTURE, DISCUSSION**

An interdisciplinary analysis of questions of cultural identity as they have been elaborated by Francophone writers during the colonial and particularly the postcolonial period, with special emphasis on French-speaking Africa, the Antilles, and the Maghreb. Through literature, social texts and film we explore such issues as tradition and modernity, conflicts between (and within) indigenous and French social codes; the Algerian war and its legacy; women and Islam. Prerequisite: two French courses above 130 or permission. Ms. Kaufmann/Offered periodically

**ID250 AID AND EMPIRE**

This course examines the history and geopolitics of foreign aid—from the Marshall Plan to the “war on terror.” What drives countries or individuals to help another? To what degree is this politically motivated? To answer such questions, we first examine the issue of empire through a series of controversial books about the “aid-industrial-complex.” In the second part of the class, we then survey the operations and practices of a variety of donors including: multi-laterals (World Bank), bi-laterals (USAID), private sector (family foundations), and individual donors. Through “seeing like a donor,” students will learn the art and craft of grant writing and other fundraising strategies for development projects. During this part of the course, students will develop a foundation proposal for a real project being planned by an NGO. Lastly, we explore alternative fundraising paradigms and emergent philanthropic trends. Ms. Grandia

**ID251 NONGOVERNMENT ORGANIZATIONS: CATALYSTS FOR DEVELOPMENT/SEMINAR**

See International Development and Social Change 251.

**ID253 SOCIAL MOVEMENTS, GLOBALIZATION AND THE STATE/LECTURE, DISCUSSION**

The emergence of global networks or transnational alliances among local, regional and national social movements, international non-governmental organizations and advocacy groups has been one of the most politically influential aspects of globalization. This course examines what is new about contemporary social movements, the nature of their transnational alliances, and their potential to transform the way states and citizens relate to one another and to the international political arena. The contested nature of civil society, the uneven influence of globalization processes, and changes in the contexts within which local communities and grassroots groups operate are explored through studies of movements concerned with the environment, human rights, development and women. Mr. Fisher/Offered every other year

**ID254 INTER-AMERICAN RELATIONS/SEMINAR**

See Government and International Relations 290.

**ID258 CONTROLLING CAPITALISM**

Controlling Capitalism Building on a comment by Noam Chomsky that “propaganda is to democracy what violence is to totalitarianism,” this course turns an anthropological gaze onto industrialized societies or what some anthropologists have called the study of “late” capitalism. Theoretically, the course introduces students to the concept of hegemony by helping them understand how invisible, normalized mechanisms of direct and indirect control (what anthropologist Laura Nader describes as “controlling processes”) shape their own lives. Through anthropological analysis we will explore how it is that people learn to participate in their own domination and how such processes of control become normalized and rendered invisible through self-censorship and other cultural mechanisms of persuasion and coercive consent. While anthropologists have traditionally viewed culture as a deep unchanging structure, this course considers the fragility and malleability of the human mind as the last frontier of neoliberalism. It seeks to problematize core Western cultural assumptions about “choice” and “individualism” and asks whether or not the North American model of corporate capitalist development is as “free” as it presents itself to be. By doing so, we revisit a perennial question about development: (a) Is what is good for business also good for democracy? and (b) is this sus-

tainable? In doing so, we explore the ambiguity of the slogan of the World Social Forum, "Another World Is Possible." Using two negative utopias 1984 and Brave New World as foils and a springboard for our imaginations, we ask what kind of world shall that be? That imagined by the elites of the World Economic Forum, or one imagined from the grassroots up? In that way, we conclude the course by looking at the means and mechanisms by which people can avoid, resist, or invent counter-controls. Ms. Grandia/Offered every year

**ID259 RELIGION, IDENTITY AND VIOLENCE IN A GLOBALIZING WORLD/LECTURE**

Examines the nature of religion and the interconnections among religious identity, political violence, and globalization in the contemporary world. It will examine conflicts that arise between groups with different religious identities as well as conflicts between religions and secularization. It will consider how globalization has failed to satisfy so many people in the world, why religion has been raised as an alternative, and why the religious rejection of secularization has been so violent. Mr. Fisher/Offered periodically

**ID260 QUANTITATIVE MODELING/LECTURE DISCUSSION**

Quantitative Modeling/Lecture Discussion Investigates the quantitative and qualitative potential of using mathematical computer models to guide policy in human/environment systems. Students learn to think with a systems perspective while translating their own conceptual models to mathematical models to computer models. Includes lab sessions in the computer room and lectures/discussion in the classroom. Culminates in written and verbal presentations of student projects. Students will gain technical proficiency in Excel and the Visual Basic for Applications (VBA) programming language. Prerequisites are GEOG110/311 Intro to Quantitative Methods or graduate standing or permission. Mr. Pontius/Offered every year

**ID261 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL/LECTURE, DISCUSSION**

See Sociology 260.

**ID262 FAMINE AND FOOD SECURITY/SEMINAR**

Access to food is a vital concern not only for many poor countries, but also for poor sections of wealthier nations. Food insecurity is a major obstacle to development throughout the world and can lead to environmental degradation, high morbidity, political instability and conflict. Famine, a condition of severe food insecurity, is often the result of a complicated mix of natural and human-generated factors. This class will consider famine and food (in)security from anthropological, sociological, political and economic perspectives. Case studies will include Africa, Asia and Western countries. The relation between food security and development efforts as the bridge between famine relief and development work, which promotes sustainable food security, will be considered. Staff/Offered periodically

**ID264 ADVANCED TOPICS IN DEVELOPMENT THEORY**

Advanced Topics in Development Theory This seminar provides students with an opportunity to engage in an in-depth study of some classical theorists of modernity and development. It aims to establish firm theoretical and textual foundations for the future study of politics, economics, culture and social relations related to third world development. Topics vary. The theme of the Fall 2008 seminar is: "Colonialism, Nationalism, and Development". Open to undergraduates with permission. Ms. Asher/Offered periodically

**ID266 PRINCIPALS OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES**

Principals of Negotiation and Mediation: An Overview of Conflict Resolution Approaches This skills-based course offers an overview of the principles of conflict management that can be applied internationally as well as interpersonally. A general framework for the understanding of conflict is presented that Includes: power-, needs-, interest-, and relationship-based conceptualizations of conflict management. Gives students a theoretical as well as practical experience of working effectively in conflict contexts. It explores some of the psychological obstacles that impede the resolution and implementation process and engages in a number of experiential exercises that help the student develop the wide range of skills needed to transform conflict relationships. Staff/Offered every year - ID266, fall semester; ID366, spring semester

**ID268 GLOBAL ETHNOGRAPHIES: ETHNOGRAPHERS IN THE MAKING FOR THE 21ST CENTURY/SEMINAR**

See Sociology 294.

**ID269 RACED NATURE, GENDERED DEVELOPMENTS: THE POLITICAL ECONOMY OF ENVIRONMENTAL CONSERVATION/SEMINAR**

Concerns about the environment and "local" needs appear central in diverse disciplinary, discursive and organizational realms across the globe. This reading-intensive interdisciplinary seminar will explore the complex and contradictory connections between economic development, the environment, and the needs of "local" peoples. The following questions will frame the seminar discussions: (1) how, why and when did concerns about the "global" environment get linked to economic development? (2) how are "local" peoples shaped by, and shape, these interactions? (3) How do the interconnected discourses of environment and development reconfigure or reinforce existing power relations (especially those that are "raced" and "gendered")? Open to undergraduate students with permission only. Ms. Asher/Offered periodically

**ID271 INTRODUCTION TO REMOTE SENSING/LECTURE, LABORATORY**

Introduces basic concepts and analytical methods of satellite remote sensing as applied to environmental systems (e.g. land-cover classification, vegetation monitoring, etc) Emphasizes processing and analysis of digital satellite images, especially Landsat, SPOT, and AVHRR data, for classification of land cover, land-cove/land-use change analysis, and other geographic topics. Final project is required for the completion of this course. Prerequisite: GEOG190/GEOG390/ID190/IDCE310 Raster GIS. Ms. Ogneva-Himmelberger/Offered every year

**ID273 ADVANCED REMOTE SENSING/LECTURE, LABORATORY**

See Geography 282.

**ID275 GENDER, POLITICS AND DEVELOPMENT IN AFRICA/SEMINAR**

See Government and International Relations 275.

**ID276 SPATIAL DATABASE DEVELOPMENT**

Examines the procedures and technologies used for spatial database development in support of Geographic Information Systems (GIS). Topics covered include sustainable database design, database import/export/update programming, advanced vector analysis, internet mapping trends and GIS-related business process modeling. Staff/Offered every year

**ID277 GENDER, ENVIRONMENT AND DEVELOPMENT/SEMINAR**

See Geography 277.



**ID279 20TH-CENTURY LATIN AMERICA/PROSEMINAR**

See History 275.

**ID280 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION**

See Geography 280.

**ID285 GENDER AND GLOBAL CHANGE/LECTURE, DISCUSSION**

Explores gender as a variable shaping people's roles, responsibilities, obligations and opportunities across cultures and nations, with particular attention to Third World societies; analyzes transformations taking place in gender roles, relations, et al, in the process of globalization; and clarifies approaches and identifies tools for socioeconomic and gender analysis in the context of participatory research and community empowerment. The course focuses on theoretical questions and policy issues, explores methods of gender analysis for research and considers gender-sensitive strategies for alleviating poverty, generating income and empowering disadvantaged social groups. Staff/Offered every other year

**ID286 ADVANCED TOPICS IN COMPARATIVE POLITICS/SEMINAR**

See Government and International Relations 286.

**ID287 POLITICS AND POWER IN THIRD-WORLD SOCIETIES/LECTURE, DISCUSSION**

Examines the evolving nation-state in the Third World, connections between colonialism and Third World political patterns, interaction between politics and internal economic and social forces, as well as the political impact of ideologies. Analyzes the politics of such groups as the landless, urban poor and women; as well as ethnic, religious, clan or caste groups. Examines patron-client relations, political parties, self-help associations and peasant mass movements for their roles in socioeconomic and political change. Staff/Offered periodically

**ID289 DEVELOPMENT POLICY/SEMINAR**

See Geography 289.

**ID291 REFUGEES AND FORCED MIGRATION/SEMINAR**

"Forced migration" is a term used to describe the process by which people flee political, religious or social persecution; war or other civil disturbance; natural disasters or environmental causes including famine; and the impacts of development efforts. Forced migrants include refugees, internally displaced persons and resettled or expelled persons. The presence of large numbers of forced migrants may provide not only obstacles and challenges to development, but can also present opportunities for meeting development goals. This seminar examines the causes of forced migration, methods used to respond to such migration by both hosts and migrants themselves, solutions to forced migration and implications for development processes in areas affected by forced migration. Students are introduced to migration theory and practice through anthropological and other social science analysis, legal instruments, policy documents and case studies of the lives of forced migrants and individual assistance operations. Open to graduate students. Undergraduates may register with instructor's permission. Staff/Offered periodically

**ID294 PARTICIPATION AND ENVIRONMENTAL MANAGEMENT/LECTURE, DISCUSSION**

Focuses on community-based participation as a means to plan and implement sustainable practices. Examples of local resource user systems are investigated to evaluate how practices of individual managers in the Third World—farmers, herders, fishermen—impact the environment. Staff/Offered every year

**ID295 GLOBALIZATION AND DEMOCRACY/SEMINAR**

See Government and International Relations 295.

**ID296 VECTOR GIS / LECTURE, LABORATORY**

ID296 - Vector GIS / Lecture, Laboratory. This course introduces important principles and concepts of GIS with hands-on experience in vector GIS software, ArcGIS Desktop. Students develop familiarity with the program and its application for spatial database development, spatial analysis, data visualization and mapping. Laboratory exercises include GIS applications in local government, natural resource management, global change, environmental justice, urban and environmental planning, public health, and census data analysis. Final project is required for the completion of this course. Ms. Ogneva-Himmelberger/Offered every semester

**MGMT252 GREEN BUSINESS MANAGEMENT**

See Management 252.

**SOC232 POPULATION, ENVIRONMENT AND DEVELOPMENT/VARIABLE FORMAT**

See Sociology 232.

**SOC250 CULTURE, CONSUMPTION AND CLASS IN LOCAL AND GLOBAL CONTEXTS/LECTURE, DISCUSSION**

See Sociology 250.

**SOC255 THE CREATION OF NATIONALISM, NATIONALIST CULTURES AND SYMBOLS/LECTURE, DISCUSSION**

See Sociology 255.

**SOC285 SOCIAL POLICY, IMMIGRATION AND POVERTY/SEMINAR**

See Sociology 285.

**SOC288 GLOBALIZATION: FASHION AND FOUL PLAY/ SEMINAR**

See Sociology 288.

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**IDCE GRADUATE PROGRAMS**

IDCE prepares students to become agents of social change—locally, nationally, and internationally—in an increasingly interconnected world.

IDCE is a community of scholars and practitioners dedicated to environmental sustainability, social justice, and economic well-being. We focus on major forces of social change: grass roots initiatives, social movements, government policy, market approaches, entrepreneurship, technological innovation, individual action, and education.

Our student body is diverse (40% are international students) and represents a very wide range backgrounds, skills, cultures, and interests. IDCE students are given the tools and understanding necessary to be successful professionals in a globalized world and to function effectively in a wide variety of settings.

Our graduates are effective professionals who can work with activists, civil society organizations, government policy makers, business people, academics, scientists, technical experts, as well as ordinary people. IDCE alumni are the decision makers in environmental, development, and social service agencies, consultancies, businesses, and non-profits in the U.S. and abroad. Other graduates pursue Ph.D., law degrees, and prestigious fellowships.

**Student-Faculty Research**

Within the IDCE program, the relationship between student and faculty is unique. Numerous innovative explorations are born from these fundamental and progressive associations.

The work we do on a local and global level is often inspired by the backgrounds, ideas and passions of our students, and they are advanced

by the experience, professional history and vast knowledge of our faculty members. That is the student-faculty relationship at Clark, known as the research triad.

The research triad is a bond linking three levels of learning: faculty member, graduate student and undergraduate student, who work together to help solve advanced research problems. Our university would not be what it is without this dynamic, and it's what preserves our place in the global community as an institution dedicated to correcting the misuses of technology and helping effect positive environmental change.

### **Sponsored Student Research**

In recent years, IDCE students have been awarded prestigious fellowships to pursue innovative research. These have included Fulbright Fellowships, David L. Boren Fellowships, Mickey Leland International Hunger Fellowships, Catholic Relief Services Fellowships, Compton Mentor Fellowships, Compton Environment and Sustained Development Fellowships, and the E7 Sustainable Energy Scholarship. Others have received Presidential Management Fellowships.

### **Local Partnerships: Putting Theory into Action**

The collaborative research projects of IDCE graduate students and faculty reflect their interdisciplinary approach to issues of environment and development. Many projects build upon partnerships between IDCE and community or governmental organizations around the United States and the globe, including in Ethiopia, Kenya, Mali, Somalia, Ghana, India and Senegal.

Locally, environmental and community groups often invite IDCE to undertake key community building projects, as well as data gathering and analysis. This allows IDCE faculty and students to put theory into practice right in the neighborhood. By helping to facilitate participatory sessions and building collaborations, students see Worcester neighbors taking action, setting priorities, and maximizing into their human capital and governmental resources. Students hone their analytical skills through GIS mapping of land parcels for development or preservation and through monitoring water quality.

For more information about current Research Activities going on at IDCE, visit [www.clarku.edu/departments/idce/researchActivities.cfm](http://www.clarku.edu/departments/idce/researchActivities.cfm).

### **Program Requirements**

Each of IDCE's four graduate programs in International Development and Social Change, Community Development and Planning; Geographic Information Sciences for Development and Environment; and Environmental Science and Policy requires a minimum of 12 graduate course units. These include required core courses, skills courses, and elective courses in the student's field of specialization. Core courses form a solid foundation, skills develop a tool-kit for fieldwork, and electives give flexibility to develop expertise in one area of specialization.

The final MA project is the culmination of the IDCE Masters experience. All four programs within IDCE offer three different options; each option requires producing a final MA project. The three options are: (1) Research Project, (2) Practitioner Project, and (3) Thesis. Descriptions of the final MA papers associated with each of the three options are provided by each program, including oral presentation requirements and details on the number of required faculty readers.

## **INTERNATIONAL DEVELOPMENT AND SOCIAL CHANGE**

### **Program Faculty**

Kiran Asher, Ph.D.  
John Baker, Ph.D.  
David Bell, Ed.D.  
Parminder Bhachu, Ph.D.  
Lois Bruinooge, J.D.  
Joseph de Rivera, Ph.D.  
Jody Emel, Ph.D.  
Cynthia Enloe, Ph.D.  
Odile Ferly, Ph.D.  
Jude Fernando, Ph.D.  
William Fisher, Ph.D.  
Ellen Foley, Ph.D.  
Richard Ford, Ph.D.  
Jacqueline Geoghegan, Ph.D.  
Liza Grandia, Ph.D.  
Beverly C. Grier, Ph.D.  
George Heaton, J.D.  
Donna Hicks, Ph.D.  
Amy Ickowitz, Ph.D.  
Douglas Johnson, Ph.D.  
Heidi Larson, Ph.D.  
Laurence A. Lewis, Ph.D.  
Ken MacLean, Ph.D.  
Elisa Martinez, M.A.  
James T. Murphy, Ph.D.  
Richard Peet, Ph.D.  
Paul W. Posner, Ph.D.  
Dianne Rocheleau, Ph.D.  
Laura Roper, Ph.D.  
Paul Ropp, Ph.D.  
Srinivasan Sitaraman, Ph.D.  
Valerie Sperling, Ph.D.  
Barbara Thomas-Slayter, Ph.D.  
B. L. Turner, Ph.D.  
Kristen Williams, Ph.D.

### **Program Overview**

The Master of Arts degree in International Development and Social Change (IDSC) emphasizes the connection between critical thinking and effective action. It is designed for scholars of international development, as well as for present and future practitioners of grassroots, community-based development.

Offering alternatives to centralized planning and implementation, the IDSC/MA program has been a pioneer in participatory development and a leading force in creating tools for social change. The challenge for the 21st-century is to promote just and equitable development and sustain environmental resources through critical thought, local planning and action. The IDCE Department and the IDSC Program stress participatory approaches that foster alliances and partnerships between local institutions and broader entities such as external development agencies, universities, and state and non-governmental organizations.

This master's program helps students conceptualize innovative approaches to development problems by building an understanding of



the complex causes, influences and implications of poverty, social injustice and conflict. Rooted in the belief that effective approaches merge many disciplines, the IDSC/MA employs a cross-disciplinary focus, with faculty from anthropology, economics, environmental sciences, women's studies, geography, history, government, and management. Links with collaborating institutions in countries such as Kenya, Nepal, Ghana, India, Senegal, and Mexico provide important real-world perspectives and field work opportunities.

The IDSC/MA Program has three key elements:

1. Challenging conventional ideas about development and seeking innovative alternatives,
2. Understanding how the interplay of power relationships gives rise to social injustice and inequity, and
3. Exploring the linkages between critical thinking and effective development practices at the community, regional, national, and global levels.

Visit [www.clarku.edu/departments/idce/academicsGradID.cfm](http://www.clarku.edu/departments/idce/academicsGradID.cfm) on the IDCE Web site for more information about the IDSC program.

### Course of Study

The master's degree in International Development and Social Change requires a minimum of 12 graduate course units. These include five required core courses, including a final research project, two skills courses, and five elective courses to form the student's field of specialization.

Through action-oriented, critical studies linking theory and practice, this master's program offers opportunities to specialize in such topics as political economy, conflict and development, education and development, health and development, culture and development, resource management, community-based development, or gender and development.

### Core Courses

1. **IDCE360 Development Theory** provides a critical overview of classical and contemporary theories of development across many disciplines. Encourages thinking historically, politically and analytically about the multiplicity of development processes and the complex relations of power that underlie them. Students are required to take IDCE360 in the fall semester of their first year.
2. **IDCE361 Development Program and Project Management** develops skills in needs assessment, project design, implementation, management, budgeting, scheduling, work plans, and monitoring/evaluation. Students are required to take IDCE361 in the spring semester of their first year.
3. **One Graduate-level Economics Course**, such as:  
**IDCE30217 Economic Fundamentals for International Development** introduces economic history, as well as microeconomics and macroeconomics to the non-economists, while illustrating practical applications of these techniques to real-world development situations. Students with some familiarity with basic economics may take IDCE30247 Development Economics. IDCE30217 is usually offered in the fall semester while IDCE30247 is usually offered in the spring. With permission of the IDSC economics instructor and the IDSC Graduate Coordinator, this requirement may be fulfilled with another graduate-level economics course. It is highly recommended that students take this core economics course in the first year of their M.A. program.

4. **IDCE314 Research Design and Methods (or its equivalents IDCE305, IDCE390, IDCE30212, IDCE30291)** reviews topics in social research design and methodology including problem definition, research strategies, sampling, data collection techniques and procedures, and proposal writing. It is highly recommended that students take a research design and methods course in their first year of their MA program, prior to beginning work on their final project.
5. **IDCE30213 Final MA Project.** Unlike other courses, the final MA project is the culmination of the IDSC Masters experience. Therefore this credit needs to be taken as part of the 12- credit IDSC Program under the mentorship of core IDSC faculty. IDCE30213 is the course unit designation for the final project. Second year IDSC students register for one credit in either the fall or the spring semesters of their second year, or half credit in each semester of their second year.

### Skill Courses (a sampling, 2 required)

IDCE30229 Program Monitoring and Evaluation  
 IDCE30292 Participatory Development Planning  
 IDCE30231 Humanitarian Assistance in Complex Emergencies  
 IDCE30275 Gender in Development Planning  
 IDCE30207 Gender, Militarization and Development  
 IDCE352 Technology and Environmental Assessment  
 IDCE30206 Technology and Sustainability: Perspectives from the Global South  
 IDCE30201 GIS and Community Profiles: Mapping Strategies for Planning and Community Development  
 IDCE30212 Research Design and Methods (or IDCE305, IDCE390, IDCE30212, IDCE30291)  
 IDCE388 Vector GIS

### Elective Courses to form an area of specialization (a sampling, 5 required)

Students select electives to focus their research, deepen their understanding of, and develop an area of specialization in one of the following areas: conflict and development, culture and development, political economy, gender and development, resource management, community-based development, health and development, education and development, or geographical information systems. This list is a sampling of specializations. Students may establish one of their own choosing. Courses might include:

IDCE30269 Raced Nature, Gendered Developments: The Political Economy of Environmental Conservation  
 IDCE30243 Seeing Like a Humanitarian Agency  
 IDCE30256 Peasants, Rural Development and Agrarian Change  
 IDCE354 Beyond Victims and Guardian Angels: Third World Women, Gender and Development  
 IDCE304 International and Comparative Analysis of Community Development  
 IDCE341 Management of NGO Organization  
 IDCE30221 Education and Development  
 IDCE30248 Gender and Health  
 IDCE373 Social Movements, Globalization and the State  
 IDCE369 Religion, Identity and Violence in a Globalizing World  
 IDCE353 International Political Ecology

### Final MA Project

There are three different options for the IDCE MA Final Project: (1) MA Final Research Paper, (2) MA Final Practitioner Paper, and (3) MA Final Thesis.

## COMMUNITY DEVELOPMENT AND PLANNING

### Program Faculty

Laurie Ross, Ph.D. - *Coordinator*

Miriam Chion, Ph.D.

Mark Tigan, Ph.D.

### Adjunct Faculty

Charles Agosta, Ph.D.

Yuko Aoyama, Ph.D.

John Baker, Ph.D.

Parminder Bhachu, Ph.D.

Joseph de Rivera, Ph.D.

Jody Emel, Ph.D.

Susan Foster, Ph.D.

Jacqueline Geoghegan, Ph.D.

Beverly C. Grier, Ph.D.

Susan Hanson, Ph.D.

Amy Ickowitz, Ph.D.

Douglas Johnson, Ph.D.

Sharon Krefetz, Ph.D.

Laurence A. Lewis, Ph.D.

Deborah Martin, Ph.D.

Richard Peet, Ph.D.

Colin Polsky, Ph.D.

Paul W. Posner, Ph.D.

Dianne Rocheleau, Ph.D.

Paul Ropp, Ph.D.

Robert Ross, Ph.D.

Joseph Sarkis, Ph.D.

Srinivasan Sitaraman, Ph.D.

B. L. Turner, Ph.D.

Kristen Williams, Ph.D.

### Affiliate Faculty

Lois Bruinooge, J.D.

Donna Hicks, Ph.D.

### Research Faculty

Cynthia Enloe, Ph.D.

Richard Ford, Ph.D.

Barbara Thomas-Slayter, Ph.D.

### Program Overview

The Community Development and Planning program provides current and future community development practitioners, activists, and scholars with a strong foundation—based on theory, skill development, and practice—to take on the challenges of urban revitalization in the United States. Our program links theory to practice through insightful participation of practitioners in seminars, high quality internships, and studio and practicum courses that allow students to learn directly from residents and community-based organizations about their resources, priorities, and strategies. Students in the Community Development and Planning Program learn alternative ways of thinking and transforming communities to achieve greater equity and social justice.

The CDP Program offers core courses and hands-on skill development in critical areas such as: community development and planning theory, planning techniques, community organizing, community development finance, grant writing, land use, decision-making and negotia-

tion, non-profit management, youth and community development, geographic information systems, and research and project evaluation methods. CDP students also benefit from a unique interdisciplinary approach to community development that integrates the perspectives and ideas of the other departmental programs: Environmental Science and Policy, Geographic Information Sciences for Development and Environment, and International Development and Social Change.

### The CDP Experience

Through the CDP program, students will:

- Understand social, economic, and political forces that shape places
- Understand communities in a regional and international context
- Gain rigorous analytical training—the ability to explore and research complex social issues, solid quantitative and qualitative skills, and strong writing and public communication skills
- Challenge existing structures of power from within or outside transitional development organizations
- Develop professional practices that trigger social change to improve quality of life
- Prepare students to be leaders in a diverse range of community development and planning roles.

See [www.clarku.edu/departments/idce/academicsGradCDP.cfm](http://www.clarku.edu/departments/idce/academicsGradCDP.cfm) for details about the Community Development and Planning program.

### Course of Study

The master's program in Community Development and Planning requires a minimum of 12 graduate course units. These include six core CDP units, two skills courses, and five elective courses related to your particular interests. The final requirement for a CDP degree is the successful completion of a final MA project.

We recommend students do an internship with a community organization to provide training in practical skills (two (2) internship credits are required for CDP BA/MA students). As part of your elective credits, you have the option of doing a directed reading/research with any faculty member. You can take a total of two (2) internship and/or directed study/research credits over the course of your CDP studies. If you want to take more than 2 credits of internship and/or directed study, you must submit a written request and rationale to the coordinator of the CDP program and the IDCE Director.

To register for a directed reading or research credit, first you must develop a draft proposal describing the topic, the rationale for the project, timeline, and what you want to accomplish (e.g. literature review, annotated bibliography, a brief research paper, etc). Then, share the draft proposal with the faculty member you want to work with. The faculty member will let you know if he or she feels your topic matches with his or her area of interest. If the faculty member agrees to work with you, he/she will give input into your proposal. Once both you and the faculty member are in agreement about the content of the directed study/research, then you can register for the credit.

Given the complexity and level of thought that goes into a directed study, you must begin to prepare for this well in advance of course registration. Typically, we don't recommend taking this on until your second year of the program, when you have a clear idea of the focus for your final MA project.



## Core Courses

### 1. IDCE 344 Going Local: Perspectives on Community

**Development and Planning** – introduces the various theories, debates, and strategies regarding the development of urban communities. Students analyze and critique traditional and emerging community development frameworks, strategies, and tools. Local community development practitioners present a “field perspective.” This course is taken during the first semester of the program.

### 2. IDCE 346 Practicum in Community Development and Planning

– operates within a community-based participatory research framework. Working with a local community-based organization, the Practicum gives students hands-on experience in constructing a community project, community-based data gathering, project development and management, neighborhood outreach, working with clients, report writing, conflict negotiation, group work, and public speaking. Students work both as a large group, as well as in smaller teams to complete their projects. This course is taken during the second semester of the program.

### 3. IDCE 30250 People and Places: Theories of Community

**Development and Planning** – deepens students understanding social, economic, and political forces that shape places and of various models and theories of community development and planning. Students learn to critique assumptions, values, and methods of approaches in order to more effectively apply them to actual cases. This course is taken during the second semester of the program.

### 4. Research Design and Methods – Students choose one of the following three courses (other methods course can be substitutes with permission from advisor). One research design and methods course should be taken during year one of the program:

a. **IDCE 314 Research Design and Methods** – covers major topics in empirical social research design and methodology: problem definition, research strategies, measurement, sampling, data collection techniques and procedures, and proposal writing.

b. **IDCE 30291 Qualitative Research Design and Methods** – provides an introduction to qualitative inquiry and explores the major assumptions, language, and logic of qualitative research. It emphasizes the modes of thinking and specific practices of qualitative research and focuses on conceptualizing and designing qualitative studies.

c. **IDCE 390 CDP Research Seminar** – advances research and skills by working on specific projects proposed by students. Students will refine their research questions or objectives, design a research methodology, and prepare a presentation of their project. This seminar focuses on the research process and the delivery of information rather than the research content. The first part of the course includes an overview of research approaches in community development and planning, as well as data interpretation, definition of assumptions, policy inferences, and assessment of contextual situations. The second part focuses on the review and discussion of students' projects to refine the overall research design. Projects can be at any stage of development, from a preliminary proposal to a completed report or thesis.

### 5. IDCE 30289 Community Development Finance – introduces students to the field of community development, with a particular focus on finance. The class explores the roles of various “field actors,” such as developers, community-based community development corporations, other nonprofits, for profits, banks, local gov-

ernments, and low-income residents. Students learn about the use of governmental subsidies to achieve public purposes, hot and cold commercial real estate markets, the basics of identifying financial gaps in public-spirited projects, the financial analysis necessary to attract debt and stimulate equity investment, strategies to fill the gaps, and ways to sustain projects. Familiarity with Excel spreadsheets is useful. This course is taken during the third semester of the program.

### 6. Students will take both of the following two 1/2 semester skills courses:

a. **IDCE Community Needs and Resource Analysis** – students develop skills in identifying and analyzing community issues through community resources and first-hand community observations and contacts. It covers a range of needs and resource assessment methods, their appropriate application, limitations, and implementation. Students learn to develop a detailed plan for assessment community needs and resources. This course is taken during the first semester of the program.

b. **IDCE 30218 Negotiations in Community Development** – daily compromises and negotiations characterize the community development profession. This course blends scholarly approaches to negotiation with real world case studies and the experiences of the instructor. Students engage in a simulated negotiation exercise. This course is taken during the third semester of the program.

### A Sampling of Community Development Skill Courses (select 2)

IDCE30204 Advanced Community Development Finance  
IDCE396 Advanced Topics in GIS  
IDCE30240 Community Planning Studio  
IDCE30212 Introduction to Quantitative Methods  
IDCE325 Data Mining Community Profiles  
IDCE363 Decision Methods for Environmental Management and Policy  
IDCE352 Technology and Environmental Assessment  
IDCE30201 GIS and Community Profiles: Mapping Strategies for Planning and Community Development  
IDCE30201 GIS and Community Profiles: Mapping Strategies for Planning and Community Development  
IDCE30225 Grant Writing for Community Developers  
IDCE30203 Program Evaluation for Youth and Community Development Initiatives  
IDCE30238 Public Communication Seminar  
IDCE334 Planning and Zoning for Community Developers  
IDCE395 Participation and Environmental Management  
IDCE366 Principals of Negotiation and Mediation: An Overview of Conflict Resolution Approaches  
IDCE30219 Risk Analysis: Policy and Methods

### A Sampling of Elective Courses

#### (select 4 from among the Skills and Electives Courses)

IDCE30205 Climate Change, Energy and Development  
IDCE30221 Education and Development  
GEOG337 Feminism, Nature and Culture  
IDCE30248 Gender and Health  
IDCE347 Globalization  
IDCE304 International and Comparative Analysis of Community Development  
IDCE30202 Land Use Seminar  
IDCE30296 Nonprofit and NGO Management Issues  
IDCE30290 Participatory Research Methods

IDCE39912 Social Policy, Immigration and Poverty  
 IDCE309 Roots and Routes: Immigrants, Diasporas and Travel  
 IDCE30265 Social Movements: Quest for Justice  
 GEOG366 Urban Economic Geography  
 GEOG354 Urban Transportation: Problems and Prospects  
 IDCE30293 Youth and Community Development

### **Final MA Project**

The final MA project is the culmination of the IDCE Masters experience. CDP students have three options to complete the final MA project: (1) Final MA Research Project, (2) Final MA Practitioner Project, and (3) Final MA Thesis.

## **ENVIRONMENTAL SCIENCE AND POLICY**

### **Program Faculty**

Jennie Stephens, Ph.D. - *Coordinator*

Halina Brown, Ph.D.

Timothy Downs, D.Env.

Robert Goble, Ph.D.

Samuel Ratick, Ph.D.

*Adjunct Faculty*

Charles Agosta, Ph.D.

John Baker, Ph.D.

Parminder Bhachu, Ph.D.

Joseph de Rivera, Ph.D.

Patrick Derr, Ph.D.

J. Ronald Eastman, Ph.D.

Jody Emel, Ph.D.

Susan Foster, Ph.D.

Jacqueline Geoghegan, Ph.D.

Beverly C. Grier, Ph.D.

Susan Hanson, Ph.D.

Dale Hattis, Ph.D.

Amy Ickowitz, Ph.D.

Douglas Johnson, Ph.D.

Sharon Krefetz, Ph.D.

Laurence A. Lewis, Ph.D.

Todd Livdahl, Ph.D.

Deborah Martin, Ph.D.

James T. Murphy, Ph.D.

Yelena Ogneva-Himmelberger, Ph.D.

Richard Peet, Ph.D.

Colin Polsky, Ph.D.

Robert Gilmore Pontius Jr, Ph.D.

Paul W. Posner, Ph.D.

Dianne Rocheleau, Ph.D.

John Rogan, Ph.D.

Paul Ropp, Ph.D.

Joseph Sarkis, Ph.D.

Srinivasan Sitaraman, Ph.D.

Valerie Sperling, Ph.D.

Kristen Williams, Ph.D.

### **Affiliate Faculty**

Donna Hicks, Ph.D.

### **Research Faculty**

Cynthia Enloe, Ph.D.

Richard Ford, Ph.D.

Barbara Thomas-Slayter, Ph.D.

## **Program Overview**

The Environmental Science and Policy (ES&P) program at Clark University prepares students for evolving and critical careers at the intersection of environmental science and policy. ES&P continues a long tradition of innovation and creative contributions to environmental challenges – the current program has evolved from one of the first environmental programs in the country to explore relationships between environmental science, technology, and society.

Environmental challenges are complex. ES&P teaches students to use knowledge and methods from both the natural and social sciences, integrate quantitative and qualitative analytical tools, and understand the connections among environment, technology, society, and development.

With this program's course of study, the ES&P student is equipped with skills and perspectives to work with a wide array of stakeholders – communities, industries, governmental agencies, NGOs, researchers, and donors – in ways that are sensitive to cultural, institutional, socio-political, and economic needs.

ES&P students have opportunities to participate in high quality, meaningful research collaborations. They have access to faculty that have experience working with a racially and socially diverse student population. ES&P graduates are able to recognize, frame, characterize, and creatively address the many environmental problems around us today.

ES&P is known for raising and addressing the hard questions – not blindly accepting “conventional wisdom” without proof and validation.

Visit the IDCE Web site at [www.clarku.edu/departments/idce/academicsGradESP.cfm](http://www.clarku.edu/departments/idce/academicsGradESP.cfm) to learn more details about the program.

### **Course of Study**

Applicants need a baccalaureate degree (or equivalent) to be eligible for the ES&P master's degree program. Domestic or overseas field experience related to environmental issues is highly desirable. The 12 course units include four required core courses, two skills courses, and then six elective courses to provide breadth and depth. We encourage students to take advantage of the diversity of courses offered throughout Clark University, and consider enrolling in courses offered in the other programs in the Department of International Development, Community, and Environment, and in other departments as approved by the student's faculty advisor.

### **Core Courses (4 plus final project)**

The ES&P core courses provide ES&P graduate students with a common academic foundation. Each of the four core ES&P faculty members teach a core course that all ES&P graduate students must take. In addition to these 4 core required courses, all students are required to register for a course (either a directed study, internship, or research course) that is designed to facilitate completion of their final MA project.

IDCE 363 Decision Methods for Environmental Management and Policy

IDCE 382 Management of Environmental Pollutants

IDCE 30205 Climate Change, Energy and Development

IDCE 30287 Fundamentals of Environmental Science

ES&P Final MA Project

All students are required to register for a course (either a directed study, guided internship, or research course) that will facilitate completion of their final MA project. This course is typically taken with the student's final project faculty advisor.



### **Skills Courses (2 skills courses are required)**

Note: This list is a sampling of skills courses, but students may request approval from their faculty advisor for other courses to be considered "skills" courses.

IDCE 332 Sustainable Development Assessment and Planning  
IDCE 30209 Environmental Research Design and Development  
(half-unit course)  
IDCE 305 Qualitative Research Methods: Skills and Application  
IDCE 310 Raster Geographic Information Systems (GIS)  
IDCE 324 Intermediate Quantitative Methods  
IDCE 332 Environmental and Social Impacts Assessment  
IDCE 349 Advanced Topics in Spatial Analysis  
IDCE 357 Dynamic Environmental Modeling  
IDCE 366 Principles of Negotiation and Mediation  
IDCE 367 Quantitative Modeling  
IDCE 371 Digital Image Processing  
IDCE 396 Advanced Topics in GIS  
IDCE 30218 Community Development Decision Making and  
Negotiation  
IDCE 388 Vector Geographic Information Systems (GIS)  
IDCE 30220 Advanced Remote Sensing

### **Elective Courses (5)**

Elective courses provide students the flexibility of designing much of their coursework to suit their own needs and to provide depth in a chosen area of focus. Students may take courses offered by the other three graduate programs in IDCE (International Development and Social Change, Community Development and Planning and Geographic Information Sciences for Development and Environment) or in other departments, as approved by their ES&P faculty advisor.

Potential ES&P elective courses include:

IDCE30288 Applied Ecology  
IDCE30276 Environmental Law  
IDCE30252 Corporate Environmental Management  
EN341 Environmental Toxicology  
IDCE30277 Sustainable Consumption and Production  
IDCE30187 International Environmental Law and Policy  
ECON257 - Environmental and Natural Resource Economics  
IDCE30270 Environment, Poverty and Health  
IDCE380 Urban Ecology  
IDCE30240 Community Planning Studio  
IDCE30269 Raced Nature, Gendered Developments: The Political  
Economy of Environmental Conservation

### **Directed Study and Guided Internships**

Students can take up to a total of two units of directed study or guided internships with a specific faculty member who agrees to guide the independent work (students may petition to take more than two units). So, in addition to the Final Project course requirement, students may opt to have an additional course of directed study or internship as an elective. To provide structure for working on the final project, students completing a professional project typically take one directed study or guided internship course, while students choosing the thesis option typically take two directed study courses.

### **Final MA Project**

The final project is the culmination of the ES&P Masters graduate program and should reflect, integrate, and synthesize what students have learned in the program. The final project is the capstone of the ES&P Masters curriculum; it is viewed as a significant and rigorous

work commensurate with the completion of a graduate degree. The ES&P program provides three options for the final MA project: (1) Final MA Research Project, (2) Final MA Practitioner Project, and (3) Final MA Thesis.

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## **GEOGRAPHIC INFORMATION SCIENCES FOR DEVELOPMENT AND ENVIRONMENT**

### **Program Faculty**

Yelena Ogneva-Himmelberger, Ph.D. - *Coordinator*  
Charles Agosta, Ph.D.  
Yuko Aoyama, Ph.D.  
John Baker, Ph.D.  
Parminder Bhachu, Ph.D.  
Lois Bruinooge, J.D.  
Joseph de Rivera, Ph.D.  
Patrick Derr, Ph.D.  
J. Ronald Eastman, Ph.D.  
Jody Emel, Ph.D.  
Cynthia Enloe, Ph.D.  
Richard Ford, Ph.D.  
Susan Foster, Ph.D.  
Jacqueline Geoghegan, Ph.D.  
Beverly C. Grier, Ph.D.  
Susan Hanson, Ph.D.  
Dale Hattis, Ph.D.  
Donna Hicks, Ph.D.  
Amy Ickowitz, Ph.D.  
Douglas Johnson, Ph.D.  
Sharon Krefetz, Ph.D.  
Laurence A. Lewis, Ph.D.  
Todd Livdahl, Ph.D.  
Deborah Martin, Ph.D.  
Richard Peet, Ph.D.  
Colin Polsky, Ph.D.  
Robert Gilmore Pontius Jr, Ph.D.  
Paul W. Posner, Ph.D.  
Dianne Rocheleau, Ph.D.  
John Rogan, Ph.D.  
Paul Ropp, Ph.D.  
Joseph Sarkis, Ph.D.  
Srinivasan Sitaraman, Ph.D.  
Valerie Sperling, Ph.D.  
Barbara Thomas-Slayter, Ph.D.  
B. L. Turner, Ph.D.  
Kristen Williams, Ph.D.

### **Program Overview**

The Master of Arts program in Geographic Information Sciences for Development and Environment (GISDE) teaches students to become professionals in careers where they apply the world's most advanced computer mapping technologies to address crucial issues concerning socioeconomic development and environmental science.

A program in collaboration with IDCE and Clark University's prestigious School of Geography, the GISDE program is unique in a variety of ways. It focuses specifically on applications of geospatial technologies to problems of sustainable development and the environment, such as:

- Food security and poverty
- Public health
- Humanitarian assistance
- Environmental justice
- Land use change and Environmental degradation
- Impacts of global environmental change

Visit the IDCE Web site at [www.clarku.edu/departments/idce/academicsGradGISDE.cfm](http://www.clarku.edu/departments/idce/academicsGradGISDE.cfm) for details about the program.

### **Course of Study**

Prerequisite: Proficiency in general computer skills and GIS – either demonstrated in a one-week workshop in mid-August or through the Vector GIS course in the first semester.

The Master's degree in Geographic Information Sciences for Development and Environment requires 12 graduate course units. These consist of six required core courses and six electives. At least one elective must be a skills course and at least one elective must be a policy course. This design allows full-time students to complete the program in either three or four semesters.

### **Core Courses**

1. **IDCE388 Vector GIS** – explores concepts and applications of vector GIS in local government, environmental justice, urban design, public health, and environmental conservation and planning by analyzing census and spatial data with ArcGIS software. (Experienced students may waive this course based on performance in the one-week workshop in mid-August.)
2. **IDCE310 Raster GIS** – explores concepts and applications of raster GIS analysis in environmental science and natural resource management using Idrisi software.
3. **IDCE371 Digital Image Processing** – introduces basic concepts and analytical methods of satellite remote sensing as applied to environmental systems.
4. **IDCE396 Advanced Topics in GIS** – considers newest theories and applications in GIS including change and time series analysis, geostatistics, 3D data visualization, uncertainty, spatial statistics and multi-criteria evaluation.
5. **IDCE391 GISDE Seminar** – requires students to complete research proposals or internship applications in the spring semester.
6. **IDCE393 or IDCE 394 GISDE Final Project** – involves collaboration with internship or research advisor to complete final project.

### **Skill Electives (a sampling \*)**

IDCE376 Spatial Database Development  
 IDCE30220 Advanced Remote Sensing  
 IDCE30212 Introduction to Quantitative Methods  
 IDCE324 Intermediate Quantitative Methods  
 IDCE349 Advanced Topics in Spatial Analysis  
 IDCE314 Research Design and Methods

### **Policy Electives (a sampling \*)**

IDCE367 Quantitative Modeling  
 IDCE363 Decision Methods for Environmental Management  
 IDCE382 Management of Environmental Pollutants  
 IDCE343 Seminar in Human Dimensions of Global Change  
 IDCE30226 Biogeochemical Cycles and Global Change

IDCE30214 Environmental Toxicology  
 IDCE30202 Land Use Seminar  
 IDCE30214 Landscape Ecology  
 IDCE30205 Climate Change, Energy and Development  
 IDCE30218 Community-Development Decision Making and Negotiation  
 IDCE30217 Economic Fundamentals for International Development  
 IDCE30231 Humanitarian Assurances in Complex Emergencies  
 IDCE30277 Sustainable Consumption and Production

### **Two Options for the Final Project**

Each student must complete a final project for which the student earns credit in either IDCE 393 or IDCE 394. There are two options for this final project: the internship option and the research option. Both options require an oral presentation and a written paper, where the format is dictated by a template that the GISDE program supplies.

For the internship option, the student applies to GIS-focused internships as part of IDCE 391 during the spring semester. During that semester, the student must complete an Internship Proposal form and obtain approval from a faculty advisor. The student will perform the internship during the summer and/or fall semesters. The student produces a paper that gives an overview of current GIS applications in the relevant field, describes how GIS was used in the internship, and how GIS could be used more effectively. The paper and presentation is completed in IDCE 393 in the fall semester under the guidance of the internship advisor. There is not a second reader for the internship option. This final project results in a public oral presentation in December. This option is recommended for students who view this Masters degree as a terminal degree and plan to spend a career in applied GIS.

For the research option, the student develops a research proposal as part of IDCE 391 during the spring semester. This proposal must be signed for approval by the selected research advisor and the second reader. The research is then performed under the guidance of the research advisor and the second reader in the context of IDCE 394 in the student's final semester. This final research project results in a paper that has a length and format appropriate for a professional peer-reviewed journal article. This final project results in a public oral presentation after the paper has been completed. This option is appropriate for students who want to engage in the creation of new methods in GIS or innovative applications of existing GIS methods. This option is recommended for students who want eventually to pursue a Ph.D.

### **IDCE Graduate Courses**

**BIOL301 ECOLOGY OF ATLANTIC SHORES/LECTURE, FIELD TRIP**  
 See Biology 201.

**BIOL316 ECOLOGY/LECTURE, LABORATORY**  
 See Biology 216.

**BIOL315 ECOLOGY OF INFECTIOUS DISEASE/SEMINAR**  
 See Biology 217.

**IDCE30288 APPLIED ECOLOGY**  
 See Biology 302.

**ID228 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION**  
 See Economics 228.

**ECON247 ECONOMICS OF POPULATION/LECTURE, DISCUSSION**  
 See Economics 247.



**IDCE30226 BIOGEOCHEMICAL CYCLES AND GLOBAL CHANGE**

See Environmental Science 203.

**IDCE30205 CLIMATE CHANGE, ENERGY AND DEVELOPMENT**

See Environmental Science 207.

**IDCE30241 ENVIRONMENTAL TOXICOLOGY/LECTURE, DISCUSSION**

See Environmental Science 241.

**IDCE357 RESEARCH SEMINAR IN DYNAMIC ENVIRONMENTAL MODELING**

See Environmental Science 256.

**IDCE363 DECISION METHODS FOR ENVIRONMENTAL MANAGEMENT AND POLICY/LECTURE, DISCUSSION**

See Environmental Science 261.

**IDCE30219 RISK ANALYSIS: POLICY AND METHODS/1/2 CREDIT/SEVEN WEEK MODULE**

See Environmental Science 265.

**IDCE30276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION**

See Government and International Relations 276.

**IDCE30212 INTRODUCTION TO QUANTITATIVE METHODS /LECTURE, LABORATORY**

See International Development and Social Change 110.

**IDCE30233 ECONOMY AND ENVIRONMENT/LECTURE, DISCUSSION**

See Geography 224.

**IDCE30214 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION**

See Geography 232.

**GEOG337 FEMINISM, NATURE AND CULTURE/SEMINAR**

See Geography 237.

**IDCE324 INTERMEDIATE QUANTITATIVE METHODS IN GEOGRAPHY/LECTURE, LABORATORY**

See Geography 247.

**IDCE305 QUALITATIVE RESEARCH METHODS, SKILLS AND APPLICATIONS/LECTURE, DISCUSSION**

See Geography 310.

**GEOG352GLOBAL ECONOMIC GEOGRAPHIES/SEMINAR**

See Geography 256.

**GEOG366 URBAN ECONOMIC GEOGRAPHY/SEMINAR**

See Geography 262.

**IDCE30263 THE CLIMATE SYSTEM AND GLOBAL ENVIRONMENTAL CHANGE/LECTURE, DISCUSSION**

See Geography 263.

**GEOG371 GROUNDWATER HYDROLOGY AND MANAGEMENT/LECTURE, DISCUSSION**

See Geography 271.

**IDCE30234 AFRICA'S DEVELOPMENT IN GLOBAL CONTEXT**

See Geography 274.

**IDCE377 GENDER, ENVIRONMENT AND DEVELOPMENT/SEMINAR**

See Geography 277.

**IDCE380 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION**

See Geography 280.

**IDCE30220 ADVANCED REMOTE SENSING/LECTURE, LABORATORY**

See Geography 282.

**IDCE376 SPATIAL DATABASE DEVELOPMENT**

See International Development and Social Change 276.

**IDCE389 DEVELOPMENT POLICY/SEMINAR**

See Geography 289.

**GEOG399 DIRECTED RESEARCH: NASA UAV PROJECT**

See Geography 290.

**IDCE371 INTRODUCTION TO REMOTE SENSING /LECTURE, LABORATORY**

See International Development and Social Change 271.

**GEOG314 \***

**IDCE314 RESEARCH PROPOSAL WRITING IN GEOGRAPHY/GRADUATE SEMINAR**

See Geography 314.

**IDCE343 SEMINAR IN HUMAN DIMENSIONS OF GLOBAL CHANGE: IMPACTS AND SOCIETAL RESPONSES/GRADUATE SEMINAR**

Geography 343.

**IDCE349 ADVANCED TOPICS IN SPATIAL ANALYSIS/SEMINAR**

See Geography 349.

**IDCE353 INTERNATIONAL POLITICAL ECOLOGY/LECTURE, DISCUSSION**

See Geography 353.

**GEOG355 SOCIAL FORESTRY, AGROECOLOGY AND DEVELOPMENT/SEMINAR**

See Geography 355.

**IDCE347 SEMINAR ON GLOBALIZATION**

See Geography 362.

**IDCE30236 GRADUATE SEMINAR IN ECONOMIC GEOGRAPHY PART I: ORIGINS AND CLASSICS/SEMINAR**

See Geography 364.

**IDCE365 GRADUATE SEMINAR IN ECONOMIC GEOGRAPHY PART II: FUNDAMENTALS AND CURRENT DEBATES/SEMINAR**

See Geography 365.

**IDCE30206 TECHNOLOGY AND SUSTAINABILITY: PERSPECTIVES FROM THE GLOBAL SOUTH/SEMINAR**

See Geography 375.

**IDCE396 ADVANCED TOPICS IN GIS/LECTURE, LABORATORY**

See Geography 397.

**IDCE308 COMPARATIVE POLITICS OF WOMEN/LECTURE, DISCUSSION**

See Government and International Relations 208.

**IDCE320 CHILD LABOR AND GLOBALIZATION/SEMINAR**

See Government 218.

**IDCE319 POLITICS AND DEVELOPMENT IN SOUTHERN AFRICA/SEMINAR**

See Government and International Relations 219.

**IDCE30253 INTERNATIONAL POLITICAL ECONOMY**

See Government and International Relations 226.

**IDCE326 GLOBAL POLITICS OF DEVELOPMENT/LECTURE, DISCUSSION**

See Government and International Relations 227.

**IDCE340 HUMAN RIGHTS AND INTERNATIONAL POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 240.

**IDCE30223 GENDER, POLITICS AND DEVELOPMENT IN AFRICA/SEMINAR**

See Government and International Relations 275.

**IDCE315 GLOBAL AIDS: THE PANDEMIC IN COMPARATIVE PERSPECTIVE/SEMINAR**

Government and International Relations 283.

**IDCE386 ADVANCED TOPICS IN COMPARATIVE POLITICS/SEMINAR**

See Government and International Relations 286.

**IDCE306 THE ATLANTIC WORLD/LECTURE, DISCUSSION**

See History 235.

**IDCE374 THE AGE OF ATLANTIC REVOLUTIONS/SEMINAR**

See History 254.

**HIST372 ADVANCED TOPICS ON LATIN AMERICA: MANY MEXICOS/RESEARCH SEMINAR**

See History 272.

**IDCE379 20TH-CENTURY LATIN AMERICA/PROSEMINAR**

See History 275.

**IDCE310 RASTER GIS/LECTURE, LABORATORY**

See International Development and Social Change 190.

**IDCE30203 PROGRAM EVALUATION FOR YOUTH AND COMMUNITY DEVELOPMENT INITIATIVES**

See International Development and Social Change 237.

**IDCE304 INTERNATIONAL AND COMPARATIVE ANALYSIS OF COMMUNITY DEVELOPMENT**

See International Development and Social Change 204.

**IDCE30256 PEASANTS, RURAL DEVELOPMENT AND AGRARIAN CHANGE**

See International Development and Social Change 206.

**IDCE354 BEYOND VICTIMS AND GUARDIAN ANGELS: THIRD WORLD WOMEN, GENDER AND DEVELOPMENT/SEMINAR**

See International Development and Social Change 209.

**IDCE313 LATIN AMERICAN POLITICS/LECTURE, DISCUSSION**

See International Development and Social Change 213.

**IDCE30230 APPLYING ANTHROPOLOGY: FROM FIELD WORK TO ACTION**

International Development and Social Change 214.

**IDCE30221 EDUCATION AND DEVELOPMENT/SEMINAR**

International Development and Social Change 221.

**IDCE30235 TRAFFICKING: GLOBALIZATION AND ITS ILLICIT COMMODITIES**

See International Development and Social 235.

**IDCE337 CULTURE, POLITICS, AND INTERNATIONAL DEVELOPMENT/LECTURE, DISCUSSION**

See International Development and Social Change 245.

**IDCE321 THE FRENCH-SPEAKING WORLD/LECTURE, DISCUSSION**

See International Development and Social Change 249.

**IDCE30273 AID AND EMPIRE**

See International Development and Social Change 250.

**IDCE341 NONGOVERNMENT ORGANIZATIONS: CATALYSTS FOR DEVELOPMENT/SEMINAR**

See International Development and Social Change 251.

**IDCE373 SOCIAL MOVEMENTS, GLOBALIZATION AND THE STATE/LECTURE, DISCUSSION**

See International Development and Social Change 253.

**IDCE369 RELIGION, IDENTITY AND VIOLENCE IN A GLOBALIZING WORLD/LECTURE**

See International Development and Social Change 259.

**IDCE312 FAMINE AND FOOD SECURITY/SEMINAR**

International Development and Social Change 262.

**IDCE30222 ADVANCED TOPICS IN DEVELOPMENT THEORY**

International Development and Social Change 264.

**IDCE366 PRINCIPALS OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES**

See International Development and Social Change 266.

**IDCE30269 RACED NATURE, GENDERED DEVELOPMENTS: THE POLITICAL ECONOMY OF ENVIRONMENTAL CONSERVATION/SEMINAR**

International Development and Social Change 269.

**IDCE375 GENDER AND GLOBAL CHANGE/LECTURE, DISCUSSION**

International Development and Social Change 285.

**IDCE381 POLITICS AND POWER IN THIRD-WORLD SOCIETIES/LECTURE, DISCUSSION**

International Development and Social Change 287.

**IDCE30297 REFUGEES AND FORCED MIGRATION/SEMINAR**

See International Development and Social Change 291.

**IDCE395 PARTICIPATION AND ENVIRONMENTAL MANAGEMENT/LECTURE, DISCUSSION**

See International Development and Social Change 294.

**IDCE388 VECTOR GIS /LECTURE, LABORATORY**

See International Development and Social Change 296.

**IDCE300 SOCIAL ANALYSIS AND ACTION—NORTH AND SOUTH/SEMINAR**

Focuses on a critical concern for this century—the enduring inequalities that plague much of the world's population. With the scale of human poverty increasing, discrimination in all forms, whatever their basis, bear close examination. This course in social-relations analysis explores the patterns and trends creating and maintaining disadvantage; it identifies approaches to social impact assessment (SIA) and enables students to work in teams to assess the structures, processes and politics of disadvantage in a specific social system. Staff/Offered every other year

**IDCE301 RESEARCH PROJECT DEVELOPMENT**

Research skills are vital if one is to make a contribution to knowledge. This is an inherently creative process, while adhering to principles and guidelines of evidence-based, "sound science." The research process is where art and science meet. This class is designed for graduate students in the Environmental Science and Policy master's program, and emphasizes the use of interdisciplinary, multidisciplinary, and transdisciplinary approaches. It has four complimentary aims: 1) Helping students to understand the research process, its components and challenges; 2) Introducing specific methods and techniques—qualitative, quantitative and mixed—and practicing them in the field; 3) Visiting and conversing with practicing researchers from a diversity of institutions (e.g. Woods Hole Marine Biological Laboratory, Harvard Forest, Harvard School of Public Health and others); and 4) Getting students well on track with their own individual research projects (papers or theses), with production of working documents that serve as the student's research plan and fill-in key sections on introduction, problem statement, research questions, literature, methods and expected results. Mr. Downs/Offered every spring

**IDCE30187 INTERNATIONAL ENVIRONMENTAL LAW AND POLICY**

IDCE30187/EN287 International environmental law and policy issues are at the forefront of the policy agenda, both domestically and in the international arena. These new challenges can be distinguished from earlier environmental problems by their global scope, long-term intergenerational consequences, and the magnitude of the changes—political, economic, behavioral and technological—they will inevitably require. This course engages students in comparative analysis of how different parts of the world, different countries, and different communities are responding to these challenges. It discusses alternative forms of global and regional policies and models of governance that are sensitive to the interests and perspectives of individual nation-states.



#### **IDCE30200 PEOPLE AND/OR PROFITS? ISSUES AT THE NEXUS OF DEVELOPMENT AND MANAGEMENT**

The worlds of business and development are increasingly intertwined: corporations are tackling social and environmental sustainability problems; and at the same time, development and planning professionals are studying management and acting entrepreneurially. Given the inevitable tension between people, nature and profits, issues at the nexus of development and management can be controversial. In this special elective, students will learn about the overlaps and assumed dichotomies among the fields of management and the areas of international development, community, and the environment. Issues will span the three sectors: for-profit, nonprofit/NGO, and government. Potential topics include poverty, leadership, technical tools such as GIS, sustainability, labor, and disaster. Each session of the seminar will be taught by a different pair of IDCE/GSOM faculty. This unique format will allow for exposure to a wide range of issues and divergent perspectives. Course director, Mr. Tigan. Offered occasionally. 7-weeks.

#### **IDCE30201 GIS AND COMMUNITY PROFILES: MAPPING STRATEGIES FOR PLANNING AND COMMUNITY DEVELOPMENT**

This seven-week introductory GIS course designed for community-development practitioners explores the relationship of census data and community indicators to GIS mapping techniques that are increasingly fundamental components of planning and community-development professions. The course covers both theoretical and practical dimensions of spatial mapping approaches to community data sets and indicators and prepares students for common mapping strategies in municipal planning departments. The course combines a lecture format that creates a theoretical foundation with practical, computer-lab exercises and projects in GIS mapping. (1/2 unit, second half Spring)  
Staff/Offered every year

#### **IDCE30202 LAND USE SEMINAR**

How do communities decide on the use of their land? Who has access to land and who does not? Under which conditions can disadvantaged groups engage in land use negotiations? How are Latino families in San Francisco battling to retain their homes and jobs against zoning rules that favor dot-com and development of expensive lofts? How are Indian Pehuenches and environmentalists in the Bio-bio river in Chile negotiating land ownership with industrialists and hydroelectric plant developers? How are artists struggling to find space to live and work in the now popular "art districts"? How are Chinese city officials creating a real estate market and for whom? Land use decisions are central to the development opportunities of any community. However, those decisions are embedded in complex political processes that in many cases obscure the social and economic implications. The task of this seminar is to explore the complexities of these processes and to understand how residents, developers and government officials negotiate land-use decisions. Major topics: Cities and environment: Natural capital in Chile, urban sprawl and smart growth in California; Urban places: Downtown, art districts, plazas; Retail trends: Big box development, street vendors, e-commerce; Profit and people: Lofts vs. family housing in San Francisco, building a real estate market in Beijing, multigenerational land ownership in Colombia. Ms. Chion/Offered every year

#### **IDCE30204 ADVANCED COMMUNITY DEVELOPMENT FINANCE AND RESEARCH**

This Master level course is designed for students who demonstrate competence in real estate or business finance and/or have successfully completed the IDCE course Community Development Finance. An

expansion of the community Development Finance course, this course includes advanced lectures on market analysis, real estate appraisal, construction contract negotiation, bonding, loan guarantees, tax credits, and brownfield financing. Combined with readings and lectures are field studies, in a studio approach, directed at specific projects with a substantive end product for potential clientele. For example: a report on the advantages and disadvantages of the Federal government's 'New Market Tax Credit' program along with a recommend process of application for a city; or the financing of a low-moderate income housing project for a nonprofit; or a strategic examination of a local community's economic health including a SWOT-type analysis. Mr. Tigan, 1/2 credit offered spring, every year, Second seven-week module

#### **IDCE30205 CLIMATE CHANGE, ENERGY AND DEVELOPMENT**

This course will explore the environment-energy challenge of development with a particular emphasis on climate change. Human burning of fossil fuels for electricity generation and transportation is changing the earth's climate by changing the composition of the atmosphere. As demand for energy increases in both developing and developed countries and the risks associated with climate change are becoming more evident, the challenges of confronting climate change are mounting. The challenges of climate change mitigation measures and the associated conflicts between developed and developing countries will be explored as will the uneven distribution of climate change impacts in the developing world. Adaptation to climate change as well as mitigation will be discussed. Ms. Stephens

#### **IDCE30207 GENDER, MILITARIZATION AND DEVELOPMENT/7-WEEK MODULE (1/2 CREDIT)**

This intensive seven-week seminar explores how the processes of militarization—in war time and in alleged peacetime—rely on certain ideas and policies about masculinity and femininity. Asking, "Where are the women?" will be central to the entire course. Among countries considered will be the Philippines, Rwanda, Afghanistan, and Chile. Among the topics whose gendered dynamics affecting development will be investigated are violence against women, militias, peacekeeping efforts, trade in small arms, definitions of "security" and the interventions of foreign governments and aid agencies. Ms. Enloe/Offered periodically

#### **IDCE30209 ENVIRONMENTAL RESEARCH DESIGN AND DEVELOPMENT**

Research is the biggest industry in the world, a vital social enterprise. This class has three complementary aims: 1) helping students to understand the research process, its principles, approaches, and challenges; 2) introducing specific methods and techniques—qualitative, quantitative and mixed—and practicing them in the field; and 3) getting students well on track with their own research projects (paper or theses). The Research Journal serves as the student's M.A. final project foundation, documenting the identification of the research topic, problem, questions, hypotheses, detailed notes on sources (literature review), and the planning and design of data collection methods. Case studies will be presented to illustrate field design and methods. Students will work in teams to undertake three field tasks: 1) design and apply a field sampling plan (air and/or water quality data) to the local environment, analyze and present results; 2) design and apply a survey questionnaire; and 3) undertake a focus group. Students will also become familiar with SPSS statistical analysis software. Seven week seminar. Mr. Downs/Offered Spring, every year

#### **IDCE30213 MASTER'S FINAL RESEARCH PAPER/WORKSHOP (1/2 CREDIT PER SEMESTER)**

A year long seminar for second-year IDCE master's degree students working on their final MA projects. Staff/Offered every year



**IDCE30217 ECONOMIC FUNDAMENTALS FOR INTERNATIONAL DEVELOPMENT**

This course is primarily intended for students entering the IDCE masters program. Its objectives are to introduce economic history, as well as microeconomics and macroeconomics to the noneconomist, while illustrating practical applications of these techniques in real-world situations. A flexible seminar format is used, in recognition of the diverse backgrounds and perspectives that students bring to this class. Staff/Offered every year

**IDCE30218 COMMUNITY-DEVELOPMENT DECISION MAKING AND NEGOTIATION**

This graduate level course will integrate negotiations with the process of making strategic decisions. The practice of community development, at all levels (e.g., manager, technician, project director, and support staff) and all venues (e.g., government, and non-profit/for profit), demands compromise and solution fitting for both basic and complex situations. Very often issue resolution involves two or more competing parties with disagreements over ultimate goals. Achieving a “win-win” scenario is an objective of competent negotiators. Students will learn the skill of negotiations, including the importance of information, the value of time and negotiated ‘position’ planning and execution. Mr. Tigan/Offered Spring

**IDCE30224 PARTICIPATORY PROJECT EVALUATION**

Provides students with an understanding of the conceptual, methodological, and practical aspects of field-based project evaluation in international development and the social context of interests and concerns within which such evaluations occur. The course covers systematically all phases of evaluation research, and places particular emphasis on the evaluation process as a collaborative undertaking that engages the participation of local resource persons (project staff, beneficiaries, local experts) adding value in the form of ownership, knowledge, and improved project design. Ms. Rachel/Offered every year

**IDCE30225 GRANT WRITING FOR COMMUNITY DEVELOPERS/SEMINAR**

Students go through a step-by-step process to gain fundamental grant research and writing skills. Writing problem statements, goals and objectives statements, program activities, evaluation templates, and logic models are covered. Students learn about public and private funding sources. The end product of this seven-week module is a completed grant proposal for an organization of the student’s choosing. Ms. Ross/Offered every year

**IDCE30229 PROGRAM MONITORING AND EVALUATION**

This half-credit course emphasizes a qualitative approach to participatory and empowering monitoring and evaluation of development projects and programs. The course aims to develop conceptual and practical skills and tools of development practitioners and focuses on the iterative action and reflection cycles of planning, collecting, analyzing interpreting, acting, utilizing and communicating data, for the purpose of monitoring and evaluating programs and projects. The course covers participatory evaluation, utilization-focused evaluation, empowerment evaluation, outcome mapping and impact evaluation. (1/2 unit, first half Spring) Mr. Bell/Offered every year

**IDCE30231 HUMANITARIAN ASSISTANCES IN COMPLEX EMERGENCIES/DISASTERS**

Disasters and Complex Humanitarian Emergencies (DCHE) have become increasingly common. Within the context of an emerging global political economy, effective delivery of humanitarian assistance has become complex and controversial. This course explores the theo-

retical and policy issues in DCHE with an emphasis on the roles of governmental and nongovernmental organizations in them. Drawing from a wide variety of case studies, this course will focus on the factors that shape risks and the vulnerability of affected populations and responses of government and NGOs. This course will provide students with comprehensive insights into the needs and policy challenges in DCHE situations and equip them with the awareness, understanding, and skills that are essential for effective service in a humanitarian crisis. It will be particularly useful for those interested in working with international and governmental organizations as well as NGOs. This is a reading-intensive, interdisciplinary course designed for a range of backgrounds and experiences. Mr. Fernando/Offered every year

**IDCE30235 TRAFFICKING: GLOBALIZATION AND ITS ILLICIT COMMODITIES**

This course turns a critical eye towards the different cultural, political, and economic processes that make contemporary forms of “trafficking” possible. It examines these transnational processes from three different vantage points, each composing one part of the course as a whole. Part one will engage many of the key concepts that inform the existing literature on “trafficking” (e.g. commodification, shadow economies, transnational criminal networks, and regulatory authority) to explore both their assumptions and their limits. Special attention is focused on the ways scholars, policymakers, and activists have historically constructed trafficking as a “problem” either for analysis or action, and how the different legal and policy frameworks created to combat it have changed over recent decades. Part two examines the above concerns in greater detail through a series of case-studies on different forms of human trafficking, the global market for organs, genetic information, animal parts, and endangered species, among others. Part three will consider some of the opportunities and dilemmas (theoretical, methodological and ethical) such practices present for those who wish to study, to manage, or to advocate on behalf of those affected by different forms of trafficking. Mr. MacLean

**IDCE30238 PUBLIC COMMUNICATION SEMINAR**

Why is it so hard to have a really good time on New Year’s Eve? Why are amusement parks some of the saddest places on the planet? Why do Creativity Courses and Speech Communication Seminars though so attractive to the business community always seem to disappoint? Because you can not approach fun, amusement, creativity or effective communication directly. There is some innate resistance. Someone trying to have fun, amuse, create, or communicate ends up not having fun, being amusing or creating anything and only communicates – effort. T.S. Elliot said that to write poetry you have to “give a bone to the watch-dog of the mind.” When community organizers study acting they develop through art’s indirect process: presence, confidence, and the ability to speak from the deepest part of themselves to that which is highest in their audience. Mr. Munro

**IDCE30239 MICROFINANCE, GENDER AND NEWLIBERALISM**

Today, micro-finance is the dominant policy in the poverty alleviation strategies world-wide. The 2006 Nobel Peace Prize was awarded to a Mohammad Yunus, a leader in micro-finance in Bangladesh. Increasingly micro-finance is used as important instrument in development policies concerned with income generation, sustainable development, gender inequality, empowerment, reproductive health, education, good governance etc., Hence, the need to develop increasingly flexible, responsive and sustainable financial products constitutes perhaps the most compelling challenge facing in development interven-



tions. This course will take an in-depth critical look at micro-finance from developmental, political economy and operational perspectives. It is based on case studies and analysis of microfinance models and experiences in different geographical regions in order to understand the strengths and weaknesses of micro-finance based financial intermediation in development. It will also examine the strategic planning, implementation, and evaluation strategies of micro-finance projects. The purpose is to provide a sound theoretical and practical knowledge of micro-finance. Mr. Fernando

#### **IDCE30240 COMMUNITY PLANNING STUDIO**

This studio focuses on the development of a specific community plan. This includes an assessment of existing conditions and their development potential; an understanding of the community goals; and the drafting of a plan, policies, and regulations. For example: The planning studio has studied the Mission of neighborhood in San Francisco in the development of its community plan and zoning controls. This planning studio identified specific policies and regulations that could enhance the economic and cultural vitality of the neighborhood, while retaining the existing population and workers. Ms. Chion/Offered every year

#### **IDCE30242 W(H)ITHER SOCIAL CHANGE?**

Implicit within the notion of social change is the promise of something better. Does such a promise bear out in practice? After acquiring some of basic social theory skills, this module will explore some of the many attempts at "social change" that have been undertaken since the drive toward "modernity." We will draw on fiction, philosophy, science, and other tools to gain a critical understanding of the multiple, contradictory, and fluid processes that underlie social struggles. The issues we will focus on include: race/ethnicity, gender, class, religious fundamentalism or nationalism, and environmental movements. (Second half of the semester) Ms. Asher

#### **IDCE30243 SEEING LIKE A HUMANITARIAN AGENCY**

Since World War II, several different but overlapping regimes have emerged to help structure humanitarian responses to large-scale forms of displacement. In what ways do these evolving regimes enable humanitarian agencies to "see," and in what ways does their particular field of vision differ from that of states, academics, policymakers and the displaced themselves? What kinds of blind-spots (theoretical, methodological, and ethical) inevitably result? This seminar will explore these questions from three different vantage points, each composing one part of the course as a whole. Part one will provide an overview of the literature and the main concepts of the course. Special attention is focused on the ways scholars and policymakers have historically constructed displacement as a "problem" either for analysis or action, and how these concerns have shifted over the past three decades. Part two will consist of ethnographic studies of humanitarian interventions in different geographic settings, which will highlight the relevance (and limits) of concepts and methods drawn from the social sciences, including anthropology. Part three will address some of the opportunities and dilemmas humanitarian emergencies present for those who wish to study or to manage them. Mr. Mclean

#### **IDCE30244 ADVANCED COMMUNITY DEVELOPMENT AND PLANNING POLICY**

Students will form a team—similar to a corporate or government approach—and as team, will discuss the paper competition entries. Reviewing entries into the policy competition and preliminary assessments/scoring of the papers. Making special notes for judges to read re:

the proposal detail and your review comparing the papers to state of the art in practice and current/historic literature. A final paper that compares the entries (depending on number of entries, you may receive a subset), performs a critical analysis of the proposed initiatives, and makes your own synthesis of the policy you deem best other tasks as may be reasonable assigned. Mr. Tigan

#### **IDCE30248 GENDER AND HEALTH**

This course introduces students to social science perspectives on the intersection of gender and health. In the course we will examine theoretical approaches to gender and health, such as feminist and political economic perspectives, and explore historical and contemporary case studies that analyze particular dimensions of gender, health, and sexuality. We will explore health issues such as health disparities along lines of gender, race and class, the regulation of reproductive health by nation-states and the "development industry", and political and social struggles for reproductive rights. We will also consider some dimensions of gender and occupational health, and contemporary health challenges such as gender violence and HIV/AIDS. These issues will be explored mainly in the context of developing countries with some cases drawn from the United States. Ms. Foley

#### **IDCE30249 THEORIZING WOMEN, GENDER AND DEVELOPMENT**

How did "third world women" and "gender" concerns enter discussions about international (economic) development? How have feminists theorized "gender" and "third world women"? What roles have third world women implicitly and explicitly played in the development enterprise? This module will explore development and feminist theories of women, gender and power to lay the ground work for how these theoretical interventions have been adopted/adapted by development institutions to "improve" the lives of third world women and "empower" them. (First seven weeks of the semester) Ms. Asher

#### **IDCE30250 PEOPLE AND PLACES: THEORIES OF COMMUNITY DEVELOPMENT AND PLANNING**

This course deepens students' understanding of social, economic, and political forces that shape places. Students learn to critique assumptions, values, and methods of various approaches in order to more effectively apply them to actual cases. Topics covered include political economy of urban areas, race, social construction of space and planning models, and theories. This course is taken during the second semester of the CDP program.

#### **IDCE30254 GENDER, POWER AND THE CHALLENGE OF MEASURING SOCIAL CHANGE**

This seven-week module explores the development practitioner's challenge in seeking to understand, and measure, changes in women's empowerment. As such, it will explore how practitioners seeking to carry out rights-based research engage (often for the first time) deeply contested ideas on gender, justice, and social change in their work, and equally contested ideas of measurement, proof, and persuasion in the world of impact research. Woven through the case material and readings is the inescapable theme of power – how it operates in the lives of women in poor societies, in the concepts and constructs of the development enterprise, and in the exercise of research and impact assessment. The seminar will require students to tack back and forth between academic and political discourses around aid effectiveness and accountability, and the choices, challenges, and tradeoffs a practitioner makes in trying to build credible, robust, and transformational impact research. (Second seven weeks of the semester)

**IDCE30256 PEASANTS, RURAL DEVELOPMENT AND AGRARIAN CHANGE**

Throughout history, outsiders have long tried to “fix” the peasantry—stereotyping them from poor and plodding to cunning and rebellious. Who are these ambiguous rural folk? And what is wrong with them? As the course will show, debates about the category of “peasants” often reflect deeper questions about the nature of capitalism, colonialism, the nation-state, rural development, and even modernity itself. The course begins with foundational texts in anthropology, and political economy attempting to define “peasants” and the unique logic of their “moral economy”. Later thematic topics include: gender and farm labor; the Green Revolution and the environment; rebellions and revolts; indigeneity; the commons and commodification; agricultural policy and transnational trade; land reform; NGO mobilization; “local food” and back-to-the-land movements. As an interdisciplinary seminar, students will have the opportunity to read ethnographies, histories, and socio-economic analyses with a broad geographic scope. We will also discuss how all these academic debates influence rural development policy and practice. Mr. Grandia/Offered Periodically

**IDCE30259 FACILITATING COMMUNITY ASSOCIATIONS**

Local community based associations play an increasingly important role in defining and shaping development initiatives. The focus of the course is on identifying, investigating, and facilitating community based associations in non-Western societies (including informal work and economic groups, women and youth groups, savings and credit societies, mutual support societies, farmers’ associations and local natural resource management groups). The course focuses on building ties of local community associations with local government authorities, NGOs and development projects, formal microfinance institutions. Students learn how to work with local experts and community members, facilitate income generating, financing and marketing activities, participate in local discourses on human rights and public health, and build ties of these groups with the formal sector and external development actors.

**IDCE30266 ENERGY AND CLIMATE SOCIAL CHANGE RESEARCH SEMINAR**

This research seminar is designed to support independent student research examining challenges, opportunities and approaches for facilitating a social and technological transition toward climate change mitigation. The course content will vary with the interests of the participants, but the course is designed for students interested in developing their own research projects on either social or technical dimensions of energy generation and use, including: renewable energy technology, electricity production and distribution, energy efficiency and conservation, new consumption patterns, new policy alternatives and technological innovation. The course will encourage students to focus on the most recent literature; current technological advances; grass roots and policy initiatives; case studies and small scale experiments with new technologies, products and services; social movements; and new and emerging policies and institutions on the scales ranging from local to regional, national and international. Ms. Stephens or Ms. Brown/Offered every year, spring semester

**IDCE30268 DONORS**

This seven-week module surveys the operations and practices of a variety international aid donors including: multi-laterals (World Bank), bi-laterals (USAID), private sector (family foundations), and individual. Through “seeing like a donor,” students will learn the art and craft of grant writing and other fundraising strategies for development projects. Ms. Grandia

**IDCE30270 ENVIRONMENT, POVERTY AND HEALTH**

This graduate seminar class will combine risk and vulnerability theory, social-learning theory and systems theory with practical applications. Readings will be discussed and fieldwork carried out. The fieldwork will interface with a local environmental-justice and health research project being carried out by the instructor and partners in Worcester. We will discuss how to develop methods to address interrelated problems of environment, poverty, social justice and health in a variety of settings. Case studies will include malaria in East Africa, and pollution-related illnesses in Central Mexico. Students will work in small teams to design intervention projects for their chosen context. Mr. Downs/Every year, 2nd half of spring

**IDCE30271 NGOS AND ADVOCACY**

Poverty is fundamentally a political problem. To find lasting solutions non-governmental organizations (NGOs) need to address the structural causes of poverty and support communities in holding governments and other influential actors, such as multi-lateral institutions and corporations, accountable. Over the last two decades this realization has drawn more and more NGOs into a wide range of advocacy efforts. At the same time, advocacy efforts are time-consuming, labor and resource intensive, and can expose NGOs to considerable risk. This course will help students think about advocacy strategically by looking at a range of examples, combined with introducing them to practical tools for developing advocacy strategies. Seven weeks module/second half of the semester

**IDCE30275 GENDER IN DEVELOPMENT PLANNING/7-WEEK MODULE (1/2 CREDIT)**

This mini-course explores the rationale for incorporating gender into development planning and analysis and builds knowledge, expertise and skills, which will enable course participants to integrate gender analysis into their various fields of academic and professional responsibility. We clarify approaches and identify tools for gender analysis in the context of participatory research, institutional change and community empowerment. We also explore methods of gender analysis for their usefulness to national policies and programs and for the design, implementation, monitoring and evaluation of programs and projects. Ms. Thomas-Slayter/Offered periodically

**IDCE30277 SUSTAINABLE CONSUMPTION AND PRODUCTION**

The increasingly unsustainable pressure on the Earth’s natural systems calls for radical changes in the way people in the industrialized and in the rapidly growing economies satisfy their appetite for goods and services. Some believe that innovation in technologies is our great hope, while others emphasize the need to change the consumption patterns of individuals and societies. Both necessitate changes in institutions, values, and social arrangements. This advanced seminar examines the role that changes in technology, institutions and culture might play in bringing about the necessary change toward more environmentally sustainable development. Four types of innovation are discussed: in the production process, in product design, in function delivery by way of products and services, and in a larger sociotechnical system. The course draws on theories of technological innovation, consumer behavior and institutionalism as well as empirical case studies from the United States, Europe, and some developing countries. The course considers the key drivers of change, such as government policy, market forces, cultural norms, activities of mission-oriented organizations, social movements, and others. Ms. Brown



**IDCE30287 FUNDAMENTALS OF ENVIRONMENTAL SCIENCE/SEMINAR**

This course will give you the literacy and skills you need to understand the science behind environmental problems that affect us all: water pollution, air pollution, environmental health risks, population growth and exploitation of natural resources. The course aims to provide a solid foundation in important scientific principles, complementing courses with a joint science-policy orientation or a more policy-oriented approach. It applies basic ideas from physics, chemistry and biology to environmental problem solving. It will also apply math skills—especially algebra and some basic calculus—to strengthen your quantitative ability. Students will be encouraged to think critically, work in teams to solve problems, present solutions and discuss topics. Real-world applications and case studies will be used to place the methods and models in a practical context. Three fieldwork sessions will also be held using instruments to measure contaminant levels in air, water and soil. Graded elements include a study journal, homework problems, class participation and a final paper on a relevant topic of your choosing. Mr. Downs/Offered every fall

**IDCE30289 COMMUNITY DEVELOPMENT FINANCE/LECTURE, DISCUSSION**

This course introduces students to the field of community development, with a particular focus on finance. The class explores the roles of various “field actors,” such as developers, community-based community-development corporations, other nonprofits, for profits, banks, local governments, and low-income residents. Students learn about the use of governmental subsidies to achieve public purposes, hot and cold commercial real-estate markets, the basics of identifying financial gaps in public-spirited projects, the financial analysis necessary to attract debt and stimulate equity investment, strategies to fill the gaps and ways to sustain projects. Familiarity with Excel spreadsheets is useful. Mr. Tigan/Offered every year

**IDCE30290 PARTICIPATORY RESEARCH METHODS/SEMINAR**

Explores a range of participatory, action-oriented and empowering approaches and methods of inquiry. The course provides a learning environment and a process that enables students to deepen their understanding of the theory and practice of participatory research. It provides an opportunity to practice specific methods and strategies and to develop critical criteria and skills for implementing and assessing participatory methods. The course balances the theoretical and conceptual dimensions of participatory research and inquiry (through readings, case studies and reflection on personal practice) with the application of participatory skills, methods, and strategies. Mr. Bell/Offered fall semester

**IDCE30291 QUALITATIVE RESEARCH DESIGN AND METHODS/SEMINAR**

Provides an introduction to qualitative inquiry and explores the major assumptions, language and logic of qualitative research. The course emphasizes the modes of thinking and specific practices of qualitative research and focuses on conceptualizing and designing qualitative studies. It explores the issues and practices of qualitative inquiry; emphasizes strategies for developing research questions; and covers methods for data gathering, analysis and interpreting qualitative research. Mr. Bell/Offered spring semester

**IDCE30292 PARTICIPATORY DEVELOPMENT PLANNING**

The course focuses on the use of participatory development planning and research in rural development planning. It provides an overview of recent initiatives of scaling-up and institutionalization of participatory development, including case studies of country-based Participatory

Poverty Assessments and other similar large-scale programs. It also discusses the specifics of local participatory planning and monitoring, including identification of beneficiary needs and project areas, facilitation of rural poor groups, participatory training of agents and promoters, necessary institutional and financial arrangements, as well as participatory action research, monitoring and evaluation. (7-week graduate skills course)

**IDCE30293 YOUTH AND COMMUNITY DEVELOPMENT: THEORY, POLICY AND PRACTICE/SEMINAR**

This course integrates readings, class discussion and field observations to understand the complex relationships between youth and community development. It provides an overview of adolescent development, with a specific focus on urban teens. Students are introduced to the strengths and challenges of young people growing up in inner-city neighborhoods. The course examines neighborhoods and after-school programs as particularly important contexts for youth development. Students discover that few youth-development programs address community-level factors that influence young people's futures, and conversely, few community-development initiatives involve youth as key actors in the development process. As a final project, students develop proposals based on evidence and driven by theory to begin to fill this critical gap. Ms. Ross/Offered every other year

**IDCE30294 THEORETICAL PERSPECTIVES AND PRACTICAL DECISION MAKING IN DEVELOPMENT/7-WEEK MODULE (1/2 ACADEMIC CREDIT)**

This course focuses on four theoretical perspectives on development and their implications for practical decision making in regard to policies and programs for two fishing communities in the fictitious country of Arcadia. Five key intellectual questions shape our discussions: Who are the disadvantaged in a given social system? What is the nature of their disadvantage? What are the social relations (structures and organizations) that maintain their disadvantage? What are the historical patterns and trends in these social relations? What are the relationships among the local, national and international levels in creating and perpetuating these disadvantages? Ms. Thomas-Slayter/Offered every year

**IDCE30296 NONPROFIT AND NGO MANAGEMENT ISSUES**

This course is designed for anyone currently, or intending to, work, run, fund or start a nonprofit or nongovernmental organization. This class is taught from the perspective of community-spirited action directed at social, economic and housing programs and projects. Although the emphasis is on domestic nonprofit organizations, some of the sessions deal with international NGOs. In addition, many of the domestic issues (e.g. financial management and board of directors' relations) are transferable to international organizations. Major topics covered include board relations, financial management and reporting, and personnel management. Full Credit. Mr. Tigan/Offered every spring

**IDCE325 DATA MINING COMMUNITY PROFILES/7-WEEK MODULE, 1/2 CREDIT**

This is a series of practical exercises in acquiring and manipulating data, mainly from the U.S. census online, in order to create a profile of a city or neighborhood. Income, poverty and linguistic isolation are examples. The course does not assume or use probability statistics, but it does make heavy use of spreadsheets and arithmetic. Student will take away templates that will allow them to perform profiles anywhere they go. Reading load is light; Internet and spreadsheet computer work is moderately heavy. Mr. Ross/Offered periodically



**IDCE331 RISK ANALYSIS AND MANAGEMENT**

Draws together disparate theories and methods for risk analysis of health, environmental and technological problems. Includes dose-response calculations, exposure assessment, modeling, fault-tree analysis, uncertainty, and risk communication. Covers intermediate statistics, Monte Carlo methods and forecast evaluation. Developed and developing country case studies will be compared. Mr. Downs/Offered periodically

**IDCE332 SUSTAINABLE DEVELOPMENT ASSESSMENT AND PLANNING**

We confront one of the most pressing issues of our time: How can society transition to more sustainable development? We discuss how 21st century impact assessment needs to evolve into a multi-stakeholder sustainability assessment process, how that can be done, its challenges and barriers. Beginning with the domestic U.S. context in Part 1, we explain the fundamentals of impact studies, and cover impacts on land resources, economy, air quality, water resources, health, historic resources, wetlands, wildlife, as well as social and cultural impacts. An emphasis is placed on which indicators of impact to use for each category, and how to measure them. In Part 2, we switch to an international context. This includes the capacity building needed for integrated environmental assessment and reporting for developing countries. Case studies are used extensively. The course has a major group project dimension: students work in teams to critically review current practice for typical development projects (e.g. wind farms, landfills, mining projects and dams), making arguments for how it should be improved. Mr. Downs/Every spring

**IDCE334 PLANNING AND ZONING FOR COMMUNITY DEVELOPERS (SEVEN WEEKS MODULE)**

This master's-level course introduces students to the field of planning and zoning for community development. The course work focuses on the practical application of planning theory. The theoretical basis for the 'nuts and bolts' planning will be devoted principally to planning for people and places. Utilizing governmental regulation and police powers within a contemporary context, the class will examine land development incentives, controls and related fields? Who does what, why, and when. Special attention will be given to the needs of the planning practitioner. The student will be exposed to many skills necessary to join the planning and zoning profession at the entry level. And the student will have the basic background with which to relate/communicate with the profession, whether that is from the perspective of a non-profit, a community development staff, or private developer. The aim of the course is not to study each topic in depth, but to provide the student with a comprehensive appreciation of the professional field. The seven week module examines the current or short term duties/tasks/techniques involved in public sector or consultancy. The topics include reading and interpreting plans, dealing with public applicants, community participation, staff reporting, green and sustainable regulations, zoning ordinances, politics of decisions and related issues. Offered first seven weeks of the semester.

**IDCE335 STRATEGIES FOR COMMUNITY ORGANIZING/7-WEEK MODULE, 1/2 CREDIT**

The objectives and strategies of community organizers in the United States since the early-20th century are reviewed, from Hull House to Alinsky to faith-based organizing. The course concludes with a discussion on whether globalization makes a difference or whether community organizing does. When possible, discussions with regional veterans will be part of the course. Reading load is moderate. Mr. Ross/Offered periodically

**IDCE341 MANAGEMENT OF NGO ORGANIZATION****IDCE344 GOING LOCAL: PERSPECTIVES ON COMMUNITY DEVELOPMENT AND PLANNING THEORY/SEMINAR**

The purpose of this seminar is to introduce students to theories, debates, and practical strategies regarding the development of urban communities. Students gain an enhanced understanding of the complexities inherent to the concepts of community and participation. They critically analyze "community" as a set of social relations, as a local economy, as a built environment, and as a political organization. Students begin to recognize the importance of race, gender, age, class, identity, and culture in working with communities. Finally, they examine the roles and effectiveness of the methods, models and strategies used by informal neighborhood organizations, banks, private developers, local nonprofits, and government agencies in rebuilding communities and their economies. Case examples and articles from across the United States will be used. Worcester's neighborhoods—which provide excellent examples of physical, social, and economic development strategies—will be highlighted throughout this course. Worcester's Piedmont and Main South neighborhoods will be a particular focus throughout the semester. Ms. Ross

**IDCE346 PRACTICUM IN COMMUNITY DEVELOPMENT AND PLANNING**

Engages students to work as a team on a critical community-development project. Students gain skills in field research, applied qualitative and quantitative data analysis, multidisciplinary teamwork, negotiation with clients, and writing professional reports. Practicum clients and topics have included a project with the Worcester Public Schools to involve public-school students in urban secondary-school reform and work with the City of Worcester and two community-development corporations on assessing the economic impact of housing production in low-income neighborhoods. Ms. Ross/Offered every year

**IDCE352 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT SEMINAR**

A survey of analytic techniques used in evaluating environmental conditions and the impacts of technology. These techniques consist of formal methods such as cost-benefit, risk-benefit, cost effectiveness and decision analysis. They also include methods used to elicit human judgment and behavioral responses in evaluating complex environmental and technical systems. Draws on case studies and teaches students to make both quantitative and qualitative assessments. Mr. Ratick/Offered every year

**IDCE358 ADVANCED TOPICS FOR ID/INTERNATIONAL FEMINIST THINKING**

In this seminar we will be investigating ideas that have come out of 5 different women's movements: from Egypt, Argentina, Nicaragua, Burma—and form feminist efforts at building international alliances. Many discussions of "feminist theory" concentrate chiefly on ideas crafted within formal university settings. These ideas, of course, have been very valuable. But in this seminar women working within movements organized to empower women, assert women's rights and improve women's material conditions. Moreover, each of the 5 movements we will explore has been self-consciously international. Even if they have focused on the conditions of women and the privileging of masculinity in their own country, these activists have drawn from international movements, or sought international allies, or coped with international pressures and interventions. Ms. Enloe/Offered periodically



**IDCE359 HUMANITARIAN ASSISTANCE IN CONFLICT/POST-CONFLICT****IDCE360 DEVELOPMENT THEORY**

An interdisciplinary graduate seminar which provides a critical overview of classical and contemporary theories of development by introducing students to writings on development across many disciplines (political economy, anthropology, geography, sociology, feminist theory). The seminar encourages students to think historically, politically and analytically about the multiplicity of development processes and the complex relations of power that underlie them. Ms. Asher, Mr. Bell/Offered every year

**IDCE361 DEVELOPMENT PROGRAM AND PROJECT MANAGEMENT/SEMINAR**

Explores relationships between development theory and project implementation, management, budget monitoring, scheduling and evaluation. Focuses on problem identification, developing project proposals designing environmental and social-impact assessments and creating evaluation frameworks. Emphasizes case studies. Mr. Fisher, Ms. Grandia/Offered every year

**IDCE363 DECISION METHODS FOR ENVIRONMENTAL MANAGEMENT**

Information on environmental impact assessments needs to be systematically organized and analyzed to be useful in the decision-making process. This course provides a survey of methods that are currently used to aid environmental decision makers, which includes policy makers, environmental managers and affected populations. Covers techniques such as decision analysis, benefit/cost analysis, multicriteria evaluation, multiobjective analysis, multiattribute utility theory, the analytical hierarchy process, and spatial analytical methods using geographical information systems. These methods will be evaluated with respect to their theoretical foundations, systems formulation and appropriate application. A critical evaluation of the strengths and weaknesses of these methods will also be discussed. Mr. Ratick/Offered every year

**IDCE364 SEMINAR ON MONITORING AND EVALUATING DEVELOPMENT PROJECTS**

Reviews the growing literature relating to the theory and methods of evaluation to learn from mistakes of past development projects in order to design more effective ones in the future. Participants think through the implications of the review in evaluating development projects of their own choice. Staff/Offered periodically

**IDCE366 PRINCIPALS OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES**

This skills-based course offers an overview of the principles of conflict management that can be applied internationally as well as interpersonally. A general framework for the understanding of conflict is presented that includes: power-, needs-, interest-, and relationship-based conceptualizations of conflict management. Gives students a theoretical as well as practical experience of working effectively in conflict contexts. It explores some of the psychological obstacles that impede the resolution and implementation process and engages in a number of experiential exercises that help the student develop the wide range of skills needed to transform conflict relationships. Staff/Offered every year: ID266, fall semester; ID366, spring semester

**IDCE367 QUANTITATIVE MODELING/LECTURE DISCUSSION**

Investigates the quantitative and qualitative potential of using mathematical computer models to guide policy in human/environment systems. Students learn to think with a systems perspective while translating their own conceptual models to mathematical models to

computer models. Includes lab sessions in the computer room and lectures/discussion in the classroom. Culminates in written and verbal presentations of student projects. Students will gain technical proficiency in Excel and other software designed for sustainability analysis. Prerequisites are MATH121 or MATH125 or graduate standing or permission. Mr. Pontius/Offered every year

**IDCE373 SOCIAL MOVEMENTS, GLOBALIZATION AND THE STATE/LECTURE, DISCUSSION**

The emergence of global networks or transnational alliances among local, regional and national social movements, international non-governmental organizations and advocacy groups has been one of the most politically influential aspects of globalization. This course examines what is new about contemporary social movements, the nature of their transnational alliances, and their potential to transform the way states and citizens relate to one another and to the international political arena. The contested nature of civil society, the uneven influence of globalization processes, and changes in the contexts within which local communities and grassroots groups operate are explored through studies of movements concerned with the environment, human rights, development and women. Mr. Fisher/Offered every other year

**IDCE376 SPATIAL DATABASE DEVELOPMENT**

Examines the procedures and technologies used for spatial database development in support of Geographic Information Systems (GIS). Topics covered include sustainable database design, database import/export/update programming, advanced vector analysis, internet mapping trends and GIS-related business process modeling. Staff/Offered every year

**IDCE385 RESEARCH THEMES IN GIS****IDCE390 CDP RESEARCH SEMINAR**

This seminar advances research and communication skills by working on specific projects proposed by students. Students will refine their research questions or objectives, design a research methodology, and prepare a presentation of their project. This seminar focuses on the research process and the delivery of information rather than the research content. The first part of the course includes an overview of research approaches in community development and planning, as well as data interpretation, definition of assumptions, policy inferences, and assessment of contextual situations. The second part focuses on the review and discussion of students' projects to refine the overall research design. Projects can be at any stage of development, from a preliminary proposal to a completed report or thesis. The third part consists of presentations by students of their proposals or findings with the intent of sharpening their delivery and communication skills. Ms. Chion/Offered every year

**IDCE392 GIS AND LAND CHANGE SCIENCE**

This course investigates methods of quantitative analysis that are typically used in land change science, especially concerning accuracy assessment and map comparison. The course focuses on the mathematical foundations of the general methods, while each technique is illustrated with data such as vegetation indices, land covers, and biodiversity potentials. We examine the advantages, disadvantages, and interpretations of the most common metrics such as Producer's Accuracy, User's Accuracy, Kappa, Pierce Skill Score, Figure of Merit, Relative Operating Characteristic, Mean Absolute Error, and Root Mean Square Error. We analyze a philosophy of map comparison that

focuses on components of agreement and disagreement between maps. There are lectures in a classroom and computer exercises in a laboratory. Class discussions focus on proper use of these metrics in the context of landscape modeling for the sake of management of land, water, and carbon dioxide. This course has a Formal Analysis designation. The prerequisite is Raster GIS and high school level algebra. Mr. Pontius

**IDCE392 GIS AND LAND CHANGE SCIENCE**

See Environmental Science 235.

**IDCE394 GISDE FINAL PROJECT**

Required for M.A. in Geographic Information Sciences for Development and Environment. The seminar is restricted to GISDE/M.A. students and focuses on the research project. Staff/Offered every semester

**IDCE396 ADVANCED TOPICS IN GIS/LECTURE, LABORATORY**

Covers major research and application issues in GIS. Topics include exploratory spatial data analysis, spatial statistics, land-change modeling, change and time-series analysis, error assessment analysis under conditions of uncertainty, and multi-criteria and multi-objective decision making. Concepts introduced during lectures are illustrated in class demos using Idrisi, ArcGIS and GeoDa software. Final project is required for the completion of this course. Prerequisite: GEOG390/IDCE310 Raster GIS and GEOG306/IDCE388 Vector GIS, or permission of instructor. Ms. Ogneva-Himmelberger/Offered every year

**IDCE397 MASTER'S THESIS**

Master's degree candidates may register while working on research for their thesis or published paper. Staff/Offered every year

**IDCE398 INTERNSHIP/FIELD WORK**

Graduate students may elect to take graduate credit for extended internships. Permission of instructor. Contact the IDCE Office for internship proposal forms. Staff/Offered every semester

**IDCE399 INDEPENDENT STUDY**

Staff/Offered every semester

**IDCE30252GREEN BUSINESS MANAGEMENT**

See Management 252.

**IDCE30237 PSYCHOLOGY OF PEACEMAKING/FIRST SEMINAR**

See Psychology 246.

**IDCE333 POPULATION, ENVIRONMENT AND DEVELOPMENT/VARIABLE FORMAT**

See Sociology 232.

**IDCE303 CULTURE, CONSUMPTION AND CLASS IN LOCAL AND GLOBAL CONTEXTS/LECTURE, DISCUSSION**

See Sociology 250.

**IDCE378 THE CREATION OF NATIONALISM, NATIONALIST CULTURES AND SYMBOLS/LECTURE, DISCUSSION**

See Sociology 255.

**IDCE309 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL/LECTURE, DISCUSSION**

See Sociology 260.

**IDCE30265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE/ VARIABLE FORMAT**

See Sociology 265.

**IDCE39912 SOCIAL POLICY, IMMIGRATION AND POVERTY/SEMINAR**

See Sociology 285.

## INTERNATIONAL STUDIES STREAM

### Program Faculty

David Angel, Ph.D.

Yuko Aoyama, Ph.D.

Kiran Asher, Ph.D.

Michael Bamberg, Ph.D.

David Bell, Ed.D.

Parminder Bhachu, Ph.D.

Sarah Buie, M.F.A.

Paul Burke, Ph.D.

Carol D'Lugo, Ph.D.

Marvin D'Lugo, Ph.D.

Joseph de Rivera, Ph.D.

Patrick Derr, Ph.D.

William Ferguson, Ph.D.

Everett Fox, Ph.D.

Wayne Gray, Ph.D.

Douglas Little, Ph.D.

Bruce London, Ph.D.

James T. Murphy, Ph.D.

Simon Payaslian, Ph.D.

Richard Peet, Ph.D.

Paul W. Posner, Ph.D.

Dianne Rocheleau, Ph.D.

Paul Ropp, Ph.D.

Walter Schatzberg, Ph.D.

Valerie Sperling, Ph.D.

Michael Spingler, Ph.D.

Barbara Thomas-Slayter, Ph.D.

Maurice Weinrobe, Ph.D.

Kristen Williams, Ph.D.

### Program Overview

The International Studies Stream is an innovative option within Clark's Program of Liberal Studies, which offers students the opportunity to structure their broad liberal-arts education by focusing on international themes and issues.

To succeed in contemporary society, students must be familiar with the different ways common problems—such as economic growth, immigration, social welfare and environmental regulation—are dealt with across the globe. Students need to understand the historical, social and political foundations for these differences, and they need to be able to assess their own societies within an international context.

The International Studies Stream helps students understand the implications of global integration for cultural identity, economic growth, peace, security and development. Language and cultural studies provide the skills necessary for effective participation in the global economy.

This program infuses students' educational experiences with an international perspective. Through courses, guest speakers, internships and study-abroad opportunities, the International Studies Stream provides the broad-based international experience students will need in our increasingly global society.



## A flexible curriculum

The foundation of the International Studies Stream is a set of courses with an international focus and enhanced language training designed to place the experience of the United States and other countries in global context.

The curriculum incorporates the best elements of undergraduate teaching: team-taught interdisciplinary courses; small classes taught in seminar format; genuine language proficiency developed in part through study outside the United States; extension of academic activities beyond the classroom through field trips, speakers programs and other informal activities; and careful mentoring of students.

This program recognizes that success in most careers now requires international perspective and language skills. International Studies Stream curriculum can be combined with any major, and is flexible enough to address the educational needs of aspiring bankers, journalists, attorneys, physicians, grassroots organizers and many others.

## Requirements

Students in any major may participate in the International Studies Stream. The program is intended to provide focus for a student's studies rather than to impose many additional requirements. The Stream includes a broad range of courses and extracurricular activities from which students can select to create an appropriate, challenging program of study. Successful completion of the Stream will be designated on students' transcripts.

**Required Core course: IDND 066 Global Society** - The globalization of cultural, economic, and political life is one of the defining modernist themes of the 20th century. The signs of international interdependence are everywhere, from the rise of Japanese automobile factories in the heartland of the United States to the success of Hollywood movies in Eastern Europe and beyond. And yet in the midst of the apparent triumph of globalization, diverse examples of fragmentation and local action and initiative also capture our attention. The great international institutions of the 20th century—the United Nations, the World Bank, and the new World Trade Organization—are also challenged by ethnic nationalism, economic protectionism, and growing introspection on the part of many countries. This course provides a widely ranging introduction to these twin themes of global and local action, and serves as the foundation for study within the International Studies Stream at Clark University. *Fulfills the Global Perspective requirement.*

**Required follow-up to Global Society: IDND 067 Problems of Globalization** - Examine some of the problems posed by globalization in the early 21st century. The issues examined include: the environment, gender, HIV/AIDS, trade, debt and structural adjustment policies of the World Bank and IMF, tourism, terrorism, cultural homogenization, population movements, war, refugees, and human rights. The course focuses in particular on the impact of globalization on the Global South or the formerly colonized regions of the world. *Fulfills the Global Perspective requirement.*

**Program of Liberal Studies (PLS) requirements** - All Clark undergraduates are required to complete eight PLS courses: a Verbal Expression course, a formal Analysis Course, and six Perspectives Courses. Students in the International Studies Stream automatically satisfy at least four of the eight PLS requirements by taking interna-

tionally focused courses in the Aesthetic Perspective, Global Perspective, Historical Perspective, Language and Culture Perspective, Values Perspective and the Verbal Expression requirement; the Formal Analysis and Scientific Perspective requirements are not part of the Stream.

**Expanded Foreign Language Proficiency** - Beyond the PLS Language and Culture Perspective requirement, ISS students complete two additional semesters of language study or demonstrate competence equivalent to two years of language study at the college level. Clark offers courses in French, Spanish, German, Japanese, Chinese, and Hebrew. Proficiency tests for other languages can be arranged.

**Study Abroad Experience** - U.S. students in the ISS complete at least one unit of study outside the United States. They may participate in a semester or yearlong study abroad program; a May Term or summer course. Financial aid for some study abroad programs is available for qualified students. Study abroad sites include Namibia, England, Scotland, China, France, Germany, Japan, Luxembourg, Spain, the Dominican Republic, Australia, and Czech Republic. International students, whose study abroad experience is at Clark, complete an internship with an international agency in the U.S., or a research project focused on an international issue. For more information about Study Abroad visit [www.clarku.edu/offices/studyabroad](http://www.clarku.edu/offices/studyabroad).

*Please note: Participation in the International Studies Stream is not required to participate in study-abroad.*

## Courses

**ARTH010 FROM THE STONE AGE TO OUR AGE: MONUMENTS AND MASTERPIECES OF WESTERN ART/LECTURE, DISCUSSION**

See Art History 010.

**ARTH159 LATIN-AMERICAN ART/LECTURE, DISCUSSION**

See Art History 159.

**AS181 CHINESE CIVILIZATION/LECTURE, DISCUSSION**

See Asian Studies 181.

**CHIN101 ELEMENTARY CHINESE/ LECTURE, DISCUSSION**

See Chinese 101.

**CMLT125 CROSSING BOUNDARIES/LECTURE, DISCUSSION**

See Comparative Literature 125.

**CMLT130 THE NATIONAL IMAGINATION**

See Comparative Literature 130.

**ECON010 ECONOMICS AND THE WORLD ECONOMY/LECTURE, DISCUSSION**

See Economics 010.

**ECON100 ECONOMICS OF ENVIRONMENTAL REGULATION**

See Economics 100.

**FREN101 ELEMENTARY FRENCH/LECTURE, DISCUSSION**

See French 101.

**FREN103 ELEMENTARY FRENCH: INTENSIVE/LECTURE, DISCUSSION**

See French 103.

**FREN105 INTERMEDIATE FRENCH I/LECTURE, DISCUSSION**

See French 105.

**FREN106 INTERMEDIATE FRENCH II/LECTURE, DISCUSSION**

See French 106.

**FREN108 PARIS AND 20TH CENTURY ARTISTIC MOVEMENTS: ART, THEATER AND CINEMA**

See French 108.

**FREN120 WAYS OF WRITING, WAYS OF SPEAKING**

See French 120.

**FREN131 READINGS IN FRENCH LITERATURE/LECTURE, DISCUSSION**

See French 131.

**FREN136 STUDIES IN THE EVOLUTION OF FRENCH CULTURE/LECTURE, DISCUSSION**

See French 136.

**FREN137 STUDIES IN CONTEMPORARY FRENCH CULTURE**

See French 137.

**GEOG016 INTRODUCTION TO ECONOMIC GEOGRAPHY/ LECTURE, DISCUSSION**

See Geography 016 .

**GEOG127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE**

See Geography 127.

**GEOG179 GLOBAL ENVIRONMENTAL JUSTICE/ LECTURE, DISCUSSION, FIRST-YEAR SEMINAR (IN ALTERNATE YEARS)**

See Geography 179.

**GERM101 INTRODUCTORY GERMAN/ LECTURE, DISCUSSION**

See German 101.

**GERM103 INTERMEDIATE GERMAN I/ LECTURE, DISCUSSION**

See German 103.

**GERM104 INTERMEDIATE GERMAN II/ LECTURE, DISCUSSION**

See German 104.

**GERM131 GERMAN CULTURE AND CONVERSATION/LECTURE, DISCUSSION**

See German 131.

**GERM188 THE CULTURE OF THE WEIMAR REPUBLIC IN LITERATURE, FILM AND THE ARTS/LECTURE, DISCUSSION**

See German 188.

**GOVT070 INTRODUCTION TO COMPARATIVE POLITICS/ LECTURE, DISCUSSION**

See Government and International Relations 070.

**GOVT090 POLITICAL SCIENCE FICTION**

See Government and International Relations 090.

**GOVT093 INTERNATIONAL HUMAN RIGHTS/FIRST-YEAR SEMINAR**

See Government and International Relations 093.

**GOVT103 AFRICA AND THE WORLD/LECTURE, DISCUSSION**

See Government and International Relations 103.

**GOVT177 TRANSITIONS TO DEMOCRACY/LECTURE, DISCUSSION**

See Government and International Relations 177.

**GOVT208 COMPARATIVE POLITICS OF WOMEN/LECTURE, DISCUSSION**

See Government and International Relations 208.

**GOVT260 DEMOCRATIC THEORY/LECTURE, DISCUSSION**

See Government and International Relations 260.

**GRK101 INTRODUCTORY GREEK I, II/LECTURE, DISCUSSION**

See Greek 101.

**HEBR101 ELEMENTARY HEBREW II/LECTURE**

See Hebrew 101.

**HEBR102 INTERMEDIATE HEBREW/LECTURE, DISCUSSION**

See Hebrew 102.

**HEBR103 INTERMEDIATE-ADVANCED HEBREW/LECTURE, DISCUSSION**

See Hebrew 103.

**HEBR104 SPECIAL TOPICS IN HEBREW/DISCUSSION**

See Hebrew 104.

**HEBR297 SEC. 6 SPECIAL TOPICS IN HEBREW/DISCUSSION**

See Hebrew 297 Sec. 6.

**HIST033 CONFUCIANISM, DAOISM, BUDDHISM: THE CULTURAL HERITAGE OF CHINA/FIRST-YEAR SEMINAR**

See History 033.

**HIST062 WAR AND PEACE IN THE MIDDLE EAST/FIRST-YEAR SEMINAR**

See History 062.

**HIST070 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM ANCIENT HEBREWS THROUGH THE RENAISSANCE AND REFORMATION/LECTURE, DISCUSSION**

See History 070.

**HIST071 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM THE 17TH CENTURY TO THE PRESENT/LECTURE, DISCUSSION**

See History 071.

**HIST080 INTRODUCTION TO MODERN EAST ASIA/LECTURE, DISCUSSION**

See History 080.

**HIST084 JAPANESE CIVILIZATION/LECTURE, DISCUSSION**

See History 084.

**HIST135 HISTORY OF ARMENIA/LECTURE, DISCUSSION**

See History 135.

**HIST162 THE HISTORY OF THE MODERN MIDDLE EAST/LECTURE, DISCUSSION**

See History 162.

**HIST181 CHINESE CIVILIZATION/LECTURE, DISCUSSION**

See History 181.

**HIST182 MODERN CHINA/LECTURE, DISCUSSION**

See History 182.

**HIST184 MODERN JAPAN/LECTURE, DISCUSSION**

See History 184.

**HIST233 CONFUCIANISM, DAOISM, BUDDHISM: INTELLECTUAL HISTORY OF CHINA/LECTURE, DISCUSSION**

See History 233.

**HIST275 20TH-CENTURY LATIN AMERICA/PROSEMINAR**

See History 275.

**ID120 INTRODUCTION TO CULTURAL ANTHROPOLOGY/LECTURE, DISCUSSION**

See International Development 120.

**ID125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT/LECTURE, DISCUSSION.**

See International Development 125.

**ID131 LOCAL ACTION, GLOBAL CHANGE/LECTURE, DISCUSSION**

See International Development 131.

**ID 161 GLOBAL CULTURES AND IDENTITIES/LECTURE, DISCUSSION**

See International Development 161.

**ID 170 ECOLOGY AND ECONOMY IN THE TROPICS/LECTURE, DISCUSSION**

See International Development 170.

**ID182 ARE WE MODERN YET?/FIRST-YEAR SEMINAR**

International Development 182.



**IDND066 GLOBAL SOCIETY**

The globalization of cultural, economic and political life is one of the defining modernist themes of the 20th century. The signs of international interdependence are everywhere, from the rise of Japanese automobile factories in the heartland of the United States to the success of Hollywood movies in eastern Europe and beyond. And yet in the midst of the apparent triumph of globalization, diverse examples of fragmentation and local action and initiative also capture our attention. The great international institutions of the 20th century—the United Nations, the World Bank, and the new World Trade Organization—are also challenged by ethnic nationalism, economic protectionism, and growing introspection on the part of many countries. This course provides a wide-ranging introduction to these twin themes of global and local action, and serves as the foundation for study within the International Studies Stream at Clark University. Fulfills the Global Perspective. Staff/Offered every year

**IDND067 PROBLEMS OF GLOBALIZATION/LECTURE, DISCUSSION**

See Government and International Relations 067.

**JAPN101 ELEMENTARY JAPANESE/LECTURE, DISCUSSION**

See Japanese 101.

**JAPN103 INTERMEDIATE JAPANESE/LECTURE, DISCUSSION**

See Japanese 103.

**JAPN105 ADVANCED JAPANESE/LECTURE, DISCUSSION**

See Japanese 105.

**LAT101 INTRODUCTORY LATIN**

See Latin 101.

**LAT103 INTERMEDIATE LATIN**

See Latin 103.

**MUSC011 MUSIC AS CULTURE/LECTURE, DISCUSSION**

See Music 011.

**PHIL104 THE AIDS PANDEMIC/FIRST-YEAR SEMINAR**

See Philosophy 104.

**PHIL105 PERSONAL VALUES/LECTURE, DISCUSSION**

See Philosophy 105.

**PHIL107 LOGIC AND LEGAL ANALYSIS/LECTURE, DISCUSSION**

See Philosophy 107.

**PHIL130 MEDICAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 130.

**PHIL131 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 131.

**PHIL132 SOCIAL AND POLITICAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 132.

**PHIL145 HISTORY OF CONTEMPORARY PHILOSOPHY/LECTURE, DISCUSSION**

See Philosophy 145.

**PHIL150 PHILOSOPHY OF RELIGION/LECTURE, DISCUSSION**

See Philosophy 150.

**PHIL221 SOCIAL AND POLITICAL PHILOSOPHY/LECTURE, DISCUSSION**

See Philosophy 221.

**PSYC176 INTRODUCTION TO PEACE STUDIES/LECTURE, DISCUSSION**

See Psychology 176.

**SCRN010 INTRODUCTION TO SCREEN ARTS**

See Screen Studies 010.

**SCRN121 HISTORY OF INTERNATIONAL CINEMA UNTIL 1960**

See Screen Studies 121.

**SCRN122 HISTORY OF AMERICAN BROADCASTING AND ELECTRONIC MEDIA**

See Screen Studies 122.

**SCRN263 STUDIES IN FRENCH CINEMA**

See Screen Studies 236.

**SOC010 INTRODUCTION TO SOCIOLOGY/VARIABLE FORMAT**

See Sociology 010.

**SOC160 GLOBAL CULTURES AND IDENTITIES/LECTURE, DISCUSSION**

See Sociology 160.

**SOC200 CLASS, STATUS AND POWER/VARIABLE FORMAT**

See Sociology 200.

**SPAN101 ELEMENTARY SPANISH I, II/DISCUSSION**

See Spanish 101.

**SPAN103 ELEMENTARY SPANISH: INTENSIVE/LECTURE, DISCUSSION**

See Spanish 103.

**SPAN105 INTERMEDIATE SPANISH I/LECTURE, DISCUSSION**

See Spanish 105.

**SPAN106 INTERMEDIATE SPANISH II/LECTURE, DISCUSSION**

See Spanish 106.

**SPAN127 PRACTICE IN ORAL AND WRITTEN SPANISH/LECTURE, DISCUSSION**

See Spanish 127.

**SPAN131 READINGS IN HISPANIC LITERATURES/LECTURE, DISCUSSION**

See Spanish 131.

**SPAN238 HISPANIC LITERATURE OF POLITICAL COMMITMENT/LECTURE, DISCUSSION**

See Spanish 238.

**SPAN246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION**

See Spanish 246.

**SPAN248 STUDIES IN LATIN-AMERICAN CINEMA/LECTURE, DISCUSSION**

See Spanish 248.

**SPAN249 STUDIES IN HISPANIC CINEMA/LECTURE**

See Spanish 249.

## MANAGEMENT

### Program Faculty

Edward J. Ottensmeyer, Ph.D. - *Dean*  
Margarete Arndt, D.B.A.  
Barbara Bigelow, Ph.D.  
Mary-Ellen Boyle, Ph.D.  
Gary Chaison, Ph.D.  
Pilsik Choi, Ph.D.  
Keith Coulter, Ph.D.  
Dileep Dhavale, Ph.D., CPA  
Priscilla Elsass, Ph.D.  
George Gendron,  
Laura Graves, Ph.D.  
Arpita Joardar, Ph.D.  
Joseph Sarkis, Ph.D.  
Inshik Seol, Ph.D.  
Richard Spurgin, Ph.D.  
Maury Tamarkin, Ph.D.  
Jing Zhang, Ph.D.

### Adjunct Faculty

John L. Crawley, M.S., J.D.  
Louis Farina, M.S., M.B.A., C.P.A.  
Jane Gilligan, M.A.  
Bhaswar Gupta, Ph.D.  
Michael Holbrook,  
Frank Jenkins, M.B.A.  
Judith Kenary, M.B.A.  
Mark Love, M.B.A.  
Gerald McCarthy, Ph.D.  
Saeed Mohaghegh, M.B.A.  
John Rainey, M.B.A.  
Ruth Rowan, M.B.A., C.F.A.  
Joel Sternberg, Ph.D.  
Kristi Thompson, M.B.A.  
Dennis Wadsworth, M.B.A.  
Russell Wass, M.S.M.

### Visiting Faculty

Ted Buswick, M.A., M. Ed.  
Wendy Jeffus, Ph.D.  
Donna Gallo, M.B.A.  
Serguey Khovansky, Ph.D.  
Kenneth Preiss, Ph.D.  
Michael Ruff, M.B.A., C.P.A.

### Emeriti Faculty

Robert Bradbury, Ph.D.  
Harold T. Moody, Ph.D.

### Program Overview

The Graduate School of Management offers five programs for undergraduates: the management major, the management major with an innovation and entrepreneurship track, the management minor, the five-year B.A./M.B.A. program and the five-year B.A./M.S.E. program. Interested students should contact the program manager in the Graduate School of Management at (508)793-7543. Students should refer to the Graduate School of Management catalog for additional information on the M.B.A. and M.S.E. programs.

## Undergraduate Requirements

The management major incorporates a variety of disciplines to form an applied preprofessional program. The undergraduate management major, minor and the M.B.A. and M.S.E. programs are accredited by the AACSB-International —The Association to Advance Collegiate Schools of Business.

The required curriculum for management majors consists of eight prerequisite courses taken during the freshman and sophomore years, and eight required courses taken during the junior and senior years. Students must have a minimum 2.0 overall grade-point average to declare management as a major. Students must take courses in the management major for letter grades. A minimum of 2.0 cumulative grade-point average in the major courses is required for graduation. Students interested in graduate study toward an M.B.A. or M.S.E. degree through Clark's accelerated program are encouraged to minor in management and consider alternative complimentary majors such as Communication and Culture, Economics, Global Environmental Studies or Government and International Relations.

### Prerequisite Management Major Courses

#### Freshman/Sophomore Years

MATH113 Mathematical Problem Solving or  
MATH120 Calculus I  
ECON010 Economics: A Comparative Approach  
ECON160 Introduction to Statistical Analysis or PSYC105  
Quantitative Methods  
MGMT100 The Art and Science of Management  
MGMT101 Principles of Accounting  
MGMT104 Introduction to Management Information Systems  
MGMT170 Managerial Communications  
MGMT203 Management Accounting

### Required Courses:

#### Junior/Senior Years

MGMT210 Management and Behavioral Principles  
MGMT230 Marketing Management  
MGMT240 Corporate Finance  
MGMT250 Operations Management  
MGMT260 Applying the Art and Science of Management  
MGMT262 Business Ethics and Law  
Two Management Electives\* (\*MGMT299 may not be used to fulfill the management elective requirement.)

### Innovation & Entrepreneurship Track

For students who are interested in the management major and wish to focus their curriculum further in the area of entrepreneurship, the Innovation and Entrepreneurship Track will provide a set of entrepreneurial experiences designed to enhance the major. The mission of this program is to provide students entrepreneurial opportunities to become economically literate, as well as a chance to explore and participate in the process of starting something new. The program is devoted to real-world entrepreneurship, which focuses on the ability to start something innovative through a student's creativity and resourcefulness.

Students interested in the management major with the Innovation and Entrepreneurship track should follow the management major requirements above making sure to take the following substitution courses:



ENT215 - fulfills one of the MGMT electives, track students take one other 200 level MGMT elective

ENT202 - is taken in place of MGMT170

ENT265 - is taken in place of MGMT260

Students should follow all other requirements for the major.

## Management Minor

Students with a primary interest in liberal arts, who also want exposure to business-related topics, should consider management as an undergraduate minor. The required curriculum for management minors consists of six courses in management, including MGMT100. Of the remaining five management courses, three must be taken at the 200 level.

### Six Required Courses:

MGMT100 The Art and Science of Management

MGMT Electives: 5 required, 3 must be 200-level or higher

Students planning for the accelerated M.B.A. or M.S.E. programs should consider the management minor. Taking the following undergraduate courses and obtaining grades of B- or better will waive certain courses in the M.B.A. or M.S.E. degree programs: MGMT101 and 203, 104, 230, 240, 250. For additional information on accelerated program requirements and other prerequisite courses, please refer to the Accelerated B.A./Master's Degree Program Web pages.

## Accelerated Degree Program

Management offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

## Graduate Programs

### Master in Business Administration

The Clark University M.B.A. program develops competence in basic management functions, skill in managing organizations and an understanding of the global environment. Each graduate of Clark's M.B.A. program is able to demonstrate:

- competence in the functional areas of management;
- in-depth understanding of one of the functional areas of management or global business;
- skill in integrating the management functions into an effective organization, and understanding the legal, political, ethical, social and environmental responsibilities of management;
- appreciation of the global context in which most organizations function; and
- the leadership and communication skills needed to formulate and implement management decisions.

### Requirements

The M.B.A. curriculum consists of a combination of seven-week course modules and full-semester, 14-week courses. Modular courses count as 1/2-unit each, while a full semester course counts as one unit. A total of 16 units are required to complete the degree. Four of the units (seven courses) may be waived if equivalent courses have been completed in an undergraduate program, with a grade of B- or better within six years. A graduate internship is required for all students with less than three years work experience in the United States.

### Required Foundation Courses

ECON4004 Management Economics (1/2 unit)

STAT4005 Statistical Methods (1/2 unit)

STAT4006 Management Decision Models (1/2 unit)

### Required Functional Courses

ACCT4100 Foundations of Accounting (1 unit)

MGMT4301 Creating Effective Organizations: Strategic Decision Making (1 unit)

MGMT4302 Creating Effective Organizations: Leadership (1 unit)

FIN4200 Financial Management (1 unit) or

FIN5301 Stock and Bond Valuation (1/2 unit)

MKT4400 Marketing Management (1 unit) or

MKT4402 Marketing Strategy and Simulation (1/2 unit)

MIS4500 Management Information Systems (1 unit) or

MIS Seven-week elective (1/2 unit)

OM4601 Operations Management (1/2 unit)

### Required General Management Courses

MGMT4707 International Management (1/2 unit)

MGMT4708 Contemporary Business Law (1/2 unit)

MGMT4709 Business in Society (1/2 unit)

Capstone (1 unit)

### Capstone

In the final stages of the M.B.A. curriculum, each student must complete a course that integrates their academic program and provides a professional, cross-disciplinary, career-building experience. Students have the opportunity to apply their academic skills to the world of practice through courses such as Management Consulting Projects (CAP5792), Entrepreneurship: Social Impact (CAP5900), Leadership and Decision Making in Organizations (CAP5784) and Global Business Seminar (CAP5783). Students should choose a capstone option that best complements their selected area of focus.

### Concentration and Free Electives

In addition to the courses listed above, students must take three to four units in one area of concentration, plus additional electives in any other area to total 16 units for the entire program. Students may choose from the following areas of concentration:

### Accounting

ACCT5101 Financial Accounting and Reporting I (1 unit)

ACCT5102 Financial Accounting and Reporting II (1 unit)

ACCT5103 Management Accounting (1 unit)

ACCT 5105 Financial and Operational Auditing (1 unit)

ACCT5107 Analysis of Financial Statements (1 unit)

ACCT5108 Business Analysis and Valuation (1 unit)

ACCT5109 Nonprofit Accounting (1 unit)

ACCT/FIN5206 Tax Strategies and Management Decisions (1 unit)

### Expanded Accounting Option

The expanded accounting concentration satisfies the 150-hour, post-secondary-education requirement for the Certified Public Accountant (CPA) examination. It also allows students an opportunity to prepare for the Certified Management Accountant (CMA) examination. Students pursuing this option must complete the foundation, functional and general management courses, along with the following six courses:

ACCT5101 Financial Accounting and Reporting I (1 unit)  
ACCT5102 Financial Accounting and Reporting II (1 unit)  
ACCT5103 Management Accounting (1 unit)  
ACCT5104 Accounting Information Systems (1 unit) or  
ACCT5109 Nonprofit Accounting (1 unit)  
ACCT5105 Financial and Operational Auditing (1 unit)  
ACCT/FIN5206 Tax Strategies and Management Decisions (1 unit)

#### **Finance**

FIN5201 Case Studies in Corporate Finance (1 unit)  
FIN5203 Investment Strategies (1 unit)  
FIN5206 Tax Strategies and Management Decisions (1 unit)  
FIN5207 Advanced Derivatives (1 unit)  
FIN5208 Fixed Income Securities (1 unit)  
FIN5214 Corporate Restructuring (1/2 unit)  
FIN5281 Case Studies in International Finance (1 unit)  
FIN5301 Stock and Bond Valuation (1/2 unit)  
FIN5302 Quantitative Techniques for Derivatives Valuation (1/2 unit)  
FIN5306 Legal Aspects of Corporate Finance (1/2 unit)  
FIN5309 Financial Econometrics (1/2 unit)  
FIN5310 Case Studies in Derivatives (1 unit)  
FIN5311 Portfolio Management (1/2 unit)  
FIN5900 Mergers and Acquisitions (1 unit)  
ACCT5107 Analysis of Financial Statements (1 unit)  
ACCT5108 Business Analysis and Valuation (1 unit)

#### **Global Business**

FIN5281 International Finance (1 unit, required for concentration)  
MKT5482 International Marketing (1 unit, required for concentration)  
MGMT4712 International Transactions (1/2 unit)  
MGMT5407 International Labor Relations (1/2 unit)  
MGMT5782 Doing Business in Northern Europe (1 unit)  
MGMT5783 Global Business Seminar (1 unit)  
MGMT5807 Cross Cultural Management (1 unit)  
MGMT5900 Global Entrepreneurship (1 unit)  
MGMT6000 Global Business Teams (1/2 unit)

#### **Management**

MGMT4305 Career Development (1/2 unit)  
MGMT4712 International Transactions (1/2 unit)  
MGMT4701 Organizational Communication (1/2 unit)  
MGMT5302 Managing Conflict and Change (1/2 unit)  
MGMT5304 Negotiation and Conflict Resolution (1/2 unit)  
MGMT5305 Industrial Relations (1/2 unit)  
MGMT5306 Diversity in the Workplace (1 unit)  
MGMT5307 International Labor Relations (1/2 unit)  
MGMT5308 Women in Management (1/2 unit)  
MGMT5401 The Contemporary Workplace (1/2 unit)  
MGMT5402 Discrimination in Employment (1/2 unit)  
MGMT5406 Collective Bargaining (1/2 unit)  
MGMT5407 International Labor Relations (1/2 unit)  
MGMT5408 Creativity, Leadership and the Arts (1 unit)  
MGMT5505 Greening the Corporation (1/2 unit)  
MGMT5604 Services Management (1 unit)  
MGMT5606 Learning by Analogy (1/2 unit)  
MGMT5609 Spirituality and Business (1 unit)  
MGMT5782 Doing Business in Northern Europe (1 unit)  
MGMT5783 Global Business Seminar (1 unit)

MGMT5792 Management Consulting Projects (1 unit)  
MGMT5802 Entrepreneurship (1 unit)  
MGMT5807 Cross Cultural Management (1 unit)  
MGMT5900 Corporate Intellectual Property (1/2 unit)

#### **Management Information Systems**

MIS5501 Database Management Systems (1/2 unit)  
MIS5505 Management of Information Technologies (1 unit)  
MIS5506 Knowledge Management in Organizations (1/2 unit)  
MIS5507 E-Commerce (1 unit)  
MIS5513 Data Security and Privacy (1 unit)  
MIS5523 Operation Systems (1 unit)  
MIS5533 Design and Analysis of Computer Networks (1 unit)  
MIS5543 Project Management (1 unit)  
MIS5553 Information Systems Analysis and Design (1 unit)  
MIS5573 Business Intelligence (1 unit)  
MIS5602 Decision Support Systems (1 unit)  
MIS5604 Web-site Development (1 unit)

#### **Marketing**

MKT5401 Marketing Research (1 unit)  
MKT5402 Consumer and Industrial Buyer Behavior (1 unit)  
MKT5403 Advertising and Promotion (1 unit)  
MKT5405 Business to Business Marketing (1 unit)  
MKT5406 Market Pricing (1 unit)  
MKT5407 Services Marketing (1 unit)  
MKT5482 International Marketing (1 unit)  
MKT5485 Personal Selling/Sales Management (1/2 unit)  
MKT5486 Branding Strategies (1 unit)  
MKT 5494 Product Management (1 unit)

#### **Free Electives**

(Count as electives but do not count towards any area of concentration)

COM4700 Managerial Communications (1/2 unit)

#### **Master of Science in Finance**

The Clark University M.S.F. program is a rigorous curriculum focusing on the skills and knowledge required to apply advanced financial theories to complex financial management problems. To be successful in this program, students need to have strong mathematical skills, along with prior course work in the following areas:

- Financial Accounting
- Economic Theory
- Statistics

#### **Requirements**

The M.S.F. degree is offered as a full time cohort program. Students complete the degree in three semesters, and an internship is required for those who have less than three years full time work experience in the United States.

The M.S.F. curriculum consists of a combination of seven-week course modules and full-semester, 14-week courses. Modular courses count as 1/2-unit each, while a full semester course counts as one unit. The curriculum for the M.S.F. consists of the following courses, totaling 10 units of credit:



FIN5301 Stock and Bond Valuation (1/2 unit)  
 FIN5302 Quantitative Techniques for Derivatives Valuation (1/2 unit)  
 FIN5311 Portfolio Management (1/2 unit)  
 FIN5309 Financial Econometrics (1/2 unit)  
 FIN5201 Case Studies in Corporate Finance (1 unit)  
 FIN5310 Case Studies in Derivatives (1 unit)  
 FIN5207 Advanced Derivatives (1 unit)  
 FIN5208 Fixed Income Securities (1 unit)  
 FIN5203 Investment Strategies (1 unit)  
 FINXXX Computational Finance (1 unit)

Electives (2 units) in the area of finance, accounting, or economics

For economics electives outside the GSOM department, please see your M.S.F. advisor.

ACCT4100 Foundations of Accounting may count as an elective and is a prerequisite for all upper-level accounting electives (or U.S.-based accounting course).

## Courses

### MGMT011 MAKING A DIFFERENCE/FIRST-YEAR SEMINAR

This course will offer a scholarly perspective on making a difference, with two emphases: youth involvement in social change, and the university partnership approach to community development. Themes of personal growth, leadership, collaboration and activism will be explored. Students will learn how to make a difference at various levels: in their lives, on the Clark campus and in the city of Worcester. This is a multidisciplinary course in which readings will be derived from the fields of sociology, psychology, community development, urban studies, education, social policy and political science. In addition to reflection papers and discussions, students will complete interviews with community leaders, take leadership roles in on-campus activities and have a community placement in the Main South or Piedmont neighborhood. The concluding assignment will be a proposal for a summer Making a Difference project, or another community-based social change activity. First Year Seminar, Offered periodically. Fulfills the Values Perspective. Ms. Ross, Ms.Boyle.

### MGMT020 STRIKES IN AMERICA/FIRST-YEAR SEMINAR

Strikes are the most exciting, controversial and unpredictable events in labor relations. In this seminar, we examine the evolution of strikes in the United States from their early use for organizing workers to their later use during collective bargaining. We examine the workers' right to strike and the employers' right to replace strikers, the various forms of strikes, the theory and practice of striking, the unions' reliance on community coalitions and political allies during strikes, and the ways that unions and employers manage legitimacy during strikes. The class will review the causes, tactics and outcomes of several recent strikes including those of nurses, baseball players, engineers, janitors, longshoremen, coal miners, teachers and slaughterhouse workers. Finally, we ask whether strikes are still effective in this age of globalization, plant relocation, low union membership, public indifference and management's frequent use of striker replacements. Staff/Offered periodically

### MGMT100 THE ART AND SCIENCE OF MANAGEMENT

This course is designed to encourage students to consider how business is embedded into the larger society. It will introduce students to basic management skills and the context in which they are applied.

Whether a person is working in a complex organization, such as a bank, university, high-tech firm, hospital or manufacturer; participating in a student-run activity; volunteering for a local nonprofit; or working a summer job—management skills are necessary. For management majors and minors, the course provides an introduction to the topics they will study in greater depth in their future course work. For students not majoring in management, it provides an opportunity to learn basic skills that will be helpful in their current and future activities in organizations. The course structure includes readings, lecture, service learning, case analyses, role plays and experiential exercises. The course involves considerable interaction between the professor and students, and among students, because the practice of management is about people working with, listening to, and respecting people who have different backgrounds, experiences and opinions. Staff/Offered every semester

### MGMT101 PRINCIPLES OF ACCOUNTING/LECTURE, DISCUSSION

A user-oriented approach teaches students an understanding of accounting information and the environment in which it is developed and used. Topics include: history of accounting, accounting cycle, accounting for assets, liabilities and equity, and international accounting issues. Staff/Offered every semester

### MGMT104 INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS/LECTURE, DISCUSSION

Emphasizes basic knowledge needed to understand the field of information systems. Topics include information and organization, database management, recent developments in computer technology and their effect on management, and information systems design and management. Staff/Offered every semester

### MGMT170 MANAGERIAL COMMUNICATIONS

Helps students communicate with confidence by showing them how to prepare clear, concise memos, letters, reports and proposals and deliver effective oral presentations. Through class participation and in-class writing exercises, students develop greater skill in both written and oral communication. Staff/Offered every semester

### MGMT203 MANAGEMENT ACCOUNTING/LECTURE, DISCUSSION

Emphasizes accounting from the management perspective. Students learn principles of management decision making using accounting information. Prerequisites: MGMT100, 101; not open to first-year students. Staff/Offered every semester

### MGMT210 MANAGEMENT AND BEHAVIORAL PRINCIPLES

General principles of management are studied, emphasizing the behavior of people in organizational settings. Topics include principles of organization, decision making, leadership, motivation and rewards, job satisfaction, appraising employee performance, and the impact of demographic diversity on organizations. Prerequisite: juniors and seniors only. Staff/Offered every fall

### MGMT215 THE ART OF THE NEW - ENTREPRENEURSHIP

Successful entrepreneurship begins with a vision. Like an artist, the entrepreneur must be able to translate creative vision into something tangible and real. This course, for both management and nonmanagement majors, is designed to introduce students to the entrepreneurial process so that they may begin to shape their own entrepreneurial vision. Course objectives will include a realistic preview of the challenges of entrepreneurship, an understanding of the legal and ethical environment within which entrepreneurs operate, the ability to devel-

op a business plan, and the skills to think critically and the ability to evaluate opportunities in the business or nonprofit sectors. The course will also include self-assessment activities designed to help students assess their own entrepreneurial potential. Staff/Offered every semester

#### **MGMT225 HUMAN RESOURCE MANAGEMENT**

Covers general functions of human resource management, including job design, recruitment, selection, management development and training, performance appraisal, employee rights, labor relations and collective bargaining, wages and fringe benefits, and compensation systems. Prerequisite: juniors and seniors only. Staff/Offered periodically

#### **MGMT226 INDUSTRIAL RELATIONS**

Introduces the concepts, theory and practice of labor-management relations. Topics include the development of the trade-union movement; union organizing; the structure, practices and outcomes of collective bargaining; the administration of the collective agreement; dispute resolution procedures; and the public policy of labor relations. Prerequisite: juniors and seniors only. Offered periodically

#### **MGMT230 MARKETING MANAGEMENT**

Surveys the role of marketing in business and society. Topics include the marketing environment, marketing research and information systems, consumer behavior, the organizational consumer, products, pricing, distribution, promotion, international service and nonprofit marketing. Prerequisites: MGMT100; juniors and seniors only. Staff/Offered every semester

#### **MGMT231 MARKETING RESEARCH**

Marketing research focuses on consumer behavior and retail advertising. Topics include primary and secondary data collection, questionnaires for attitude and awareness surveys, mail and phone surveys, personal interviews, focus groups and data-analysis techniques. Prerequisites: MGMT230; juniors and seniors only. Staff/Offered periodically

#### **MGMT234 CONSUMER BEHAVIOR**

Examines how people search for, purchase, use, evaluate and dispose of the products, services and ideas they expect to satisfy their needs. Emphasizes the issues of market segmentation and the diffusion of innovations. Ethical, legal and public-policy issues are also discussed. Prerequisites: MGMT230; juniors and seniors only. Staff/Offered periodically

#### **MGMT236 RETAILING MANAGEMENT**

Gives a general analysis of the structure of retailing emphasizing the retailing environment and operating efficiencies; includes patronage behavior, merchandise control, pricing, promotion, location, and vendor relations; and gives special attention to emerging trends in retailing. Prerequisite or concurrent: MGMT230. Staff/Offered every spring

#### **MGMT240 CORPORATE FINANCE**

Examines financial decision making by the internal financial manager. A study is made of valuation, cost of capital, capital structure, capital budgeting and financial analysis. Prerequisites: ECON010; MATH113, 119 or 120; MGMT100, 101; ECON160 or PSYC105; juniors and seniors only. Staff/Offered every semester

#### **MGMT242 INVESTMENTS**

Covers investment principles, market behavior and investment strategy. Investment principles include portfolio selection, fundamental analysis, portfolio theory, debt instruments and money markets, the stock-option market and alternative investments. Prerequisites: MGMT240; juniors and seniors only. Staff/Offered periodically

#### **MGMT245 SOCIAL ENTREPRENEURSHIP**

This course is designed to introduce students to the complex dynamics underlying social entrepreneurship, of the use of business entrepreneurial skills as a means of creatively responding to societal problems. It challenges the student to look beyond well-established business objectives—the creation of wealth—and investigate how wealth creation can impact public good. An investigation of global social entrepreneurial initiatives is also an important focus of the course. Staff/Offered every semester

#### **MGMT250 OPERATIONS MANAGEMENT**

Provides overview of operations-management systems, emphasizing model building and applications. Topics include forecasting, quality control, inventory management, material requirement planning, machine loading, job sequencing and scheduling, project management and control, decision theory and linear programming. Prerequisites: ECON010; MATH113, 119 or 120; MGMT100, 101; ECON160 or PSYC105; juniors and seniors only. Staff/Offered every semester

#### **MGMT252 GREEN BUSINESS MANAGEMENT**

This course will present many of the issues facing business and industry with relation to the natural environment. Topics such as external competitive pressures, internal strategic planning and positioning, corporate social responsibility, and stakeholder theory will be examined from a corporate environmental perspective. Case-study analysis, readings, speakers, videos and facility tours will be the methods of study. Prerequisite: juniors and seniors only. Staff/Offered periodically

#### **MGMT255 NAVIGATING NONPROFIT DILEMMAS TO CREATE SOCIAL CHANGE**

If the '80s and '90s were the "decades of the entrepreneur," then this is surely the era of the social entrepreneur. Never before have the opportunities to create social change been greater. And yet this discipline of social entrepreneurship is still in its infancy. This course will introduce students to the "inflection points" in building a sustainable social venture—those moments or stages of development in the life cycle of a social venture that are characterized by debate, tension, and ambiguity even among the most experienced practitioners and observers in the field. Students will gain a deeper understanding of the multiple stakeholders who have a say in the provision of services and the creation of social value, and will be exposed to examples of how good intent can lead to inferior programming or failure in the absence of planning and mindful adaptation. The course has a community engagement component that spans the semester and provides a balance to the often tidy prescriptions and descriptions of nonprofit practice. Prerequisite: MGMT/ENT215 OR MGMT/ENT245 OR MGMT011.

#### **MGMT260 APPLYING THE ART AND SCIENCE OF MANAGEMENT**

This course serves as a complement to MGMT100, in that it offers a multidisciplinary and cross-functional consideration of the firm in its environment. The purpose of the course is two-fold: to give students various opportunities to integrate and apply the knowledge gained in the management major and to help students understand the roles and responsibilities of business organizations in the external environment. In this course, students will focus on the development of professional skills and will create a portfolio of accomplishments to assist in their careers. This course is required for all majors, serves as a capstone and must be taken during the senior year. Prerequisites: MGMT210, 230, 240, 250; seniors only. Staff/Offered every fall and spring semester



### **MGMT262 BUSINESS ETHICS AND LAW**

The purpose of this course is to provide students with knowledge about the legal framework under which U.S. businesses operate and with an understanding of the ethical foundations of business decisions. An appreciation of the complex interactions between ethics and the law is the goal. The course will examine such topics as product safety, privacy, human rights, advertising, bribery, media, community relations and diversity. Fulfills the values perspective. Prerequisite: Seniors only.

Staff/Offered every spring semester

### **MGMT299 INTERNSHIPS/DIRECTED READINGS**

Internships and directed readings, open to juniors and seniors only, are offered to qualified students upon application. They are limited to no more than one course credit each and do not count toward the management major or minor requirements. Students may take no more than two each of such courses in the Management Department. All MGMT299 courses must be approved by the Graduate School of Management program administrator or assistant dean.

### **ACCT4100 FOUNDATIONS OF ACCOUNTING**

Managers use accounting data to measure and evaluate organizational performance and to make decisions. This course introduces accounting as the language of business by identifying and discussing principles and concepts. Topics include recording process, financial reporting and the application of accounting information in managerial decision processes. Students are provided opportunities to enhance their analytic skills through practice in compilation, reformulation and analysis of basic financial data. 14 weeks

### **ACCT5101 FINANCIAL ACCOUNTING AND REPORTING I**

Accounting issues relevant to commercial organizations are numerous and complex. A set of accounting literature, referred to as Generally Accepted Accounting Principles or GAAP, guides the profession in the resolution of these issues. This course does not attempt to cover all GAAP, but rather provides a foundation for solving practical financial problems by introducing certain topics that are important in understanding the complexities of the business and financial world. The conceptual framework of accounting is discussed and then used as a basis to study accounting literature related to the recognition and measurement of current and noncurrent assets, current and noncurrent liabilities, stockholders' equity, and the development of income statements and balance sheets. (Prerequisite: ACCT4100 or U.S. accounting course) 14 weeks

### **ACCT5102 FINANCIAL ACCOUNTING AND REPORTING II**

A continuation of Financial Accounting and Reporting I, this course addresses accounting literature guiding the profession in such areas as accounting for income taxes, pensions and postretirement benefits, and leases. The treatment of accounting changes and errors, the preparation of the statement of cash flows and the disclosure required in financial reporting are also discussed. Finally, advanced topics such as business combinations, consolidated financial statements and accounting for partnerships are addressed. Prerequisite: ACCT4100 or U.S. accounting course. 14 weeks

### **ACCT5103 MANAGEMENT ACCOUNTING**

This course covers the collection and analysis of cost data, methods of cost control and the relevance of various accounting data for managerial decision making in manufacturing and nonmanufacturing organi-

zations. Topics include: activity-based costing and management, standard costing issues, decision making with management accounting data, budget analysis, new cost-management issues, and various cost-control and performance-evaluation issues. Typically offered every summer. Prerequisite: ACCT4100 or U.S. accounting course. 14 weeks

### **ACCT5104 ACCOUNTING INFORMATION SYSTEMS**

This course explains the various control and accounting procedures used in collecting, measuring, summarizing and reporting financial data generated by an organization's operating units. The course emphasizes procedural techniques and studies the flow of financial data through an organization's accounting system. Prerequisite: ACCT4100 or U.S. accounting course. 14 weeks

### **ACCT5105 FINANCIAL AND OPERATIONAL AUDITING**

This course covers fundamental aspects of financial auditing including management's responsibility for financial statements, the legal liability of auditors, evaluation of internal control structures, substantive tests and tests of systems and audit reports. Operational auditing and current developments in environmental auditing are also covered. (Prerequisite: ACCT4100 or U.S. accounting course) 14 weeks

### **ACCT5107 ANALYSIS OF FINANCIAL STATEMENTS**

The topics covered in this course are intended to increase skill levels in interpreting financial statements and reports, reconstructing and restructuring financial data, use of analytical techniques for financial-statement analysis and communicating financial results. Prerequisite: ACCT4100 or U.S. accounting course. May be taken as a finance elective FIN5107. 14 weeks

### **ACCT5108 BUSINESS ANALYSIS AND VALUATION**

This course examines accounting, finance, business strategy and financial forecasting and valuation concepts. The first part of the course develops methods and techniques, which are later used in the evaluation of equity and debt financing of corporations, analysis of acquisitions and mergers of companies, credit analysis, prediction of financial distress and bankruptcies, evaluation of corporate financial policies, and improvement of communication with investors and creditors of corporations. This case-oriented course emphasizes how to apply accounting, finance and business strategy concepts in practical situations. The course relies heavily on financial information analyses and will count as an accounting or finance elective in both the M.B.A. and M.S.F. programs. Prerequisite: ACCT4100 or U.S. accounting course. Offered periodically. 14 weeks

### **ACCT5109 NONPROFIT ACCOUNTING**

This course will discuss various accounting issues unique to nonprofit entities. We will first discuss general financial reporting (a bit of a review of ACCT4100) then bridge that knowledge to nonprofit organizations. In particular, we will look at financial accounting for state and local governments, voluntary health and welfare organizations, colleges and universities, and health-care organizations. We will also cover regulatory and taxation issues unique to nonprofits and then discuss audits of nonprofits and the costing of nonprofit services. The objective of the course is for you to develop a comprehensive understanding of these issues. Prerequisite: ACCT4100 or U.S. accounting course. 14 weeks

### **CAP5783 GLOBAL BUSINESS SEMINAR**

See Management 5783.

**CAP5784 LEADERSHIP AND DECISION MAKING IN ORGANIZATIONS**

The course offers an opportunity to reflect on how and why organizational leaders make operational or strategic decisions and on the context in which they are made. Course content includes presentations by executives, regular class sessions and several papers. All students will choose an aspect of organizational decision making as the focus of their work during the semester. Prerequisites: required core courses. 14 weeks.

**CAP5792 MANAGEMENT CONSULTING PROJECTS**

See Management 5792.

**CAP5802 ENTREPRENEURSHIP: SOCIAL IMPACT**

See Management 5802.

**COM4700 MANAGEMENT COMMUNICATIONS**

This course is designed to help managers communicate with confidence by showing them how to prepare clear, concise memos, letters, reports and proposals, as well as how to deliver effective oral presentations. Through active class participation and in-class writing exercises, students develop confidence in their ability to communicate effectively. Seven weeks

**ECON4004 MANAGEMENT ECONOMICS**

Managers of organizations—whether for profit, nonprofit or government agencies—face a common set of resource-allocation problems. This course will develop a student's ability to formulate and solve these problems, drawing upon the economic theories of consumer demand, the firm and industrial organization, as well as mathematical optimization techniques. It will provide a framework for analyzing the flexible multiproduct firm, as well as competitive and cooperative business situations from a strategic (game theoretic) perspective. Topics to be surveyed include: demand analysis, production and cost analyses, flexible manufacturing, market structure and strategic behavior, pricing practices, government regulation and decision making under uncertainty. Seven weeks

**FIN4200 FINANCIAL MANAGEMENT**

Managers invest to optimize the size and timing of future cash flows and to minimize accompanying risks with the goal of increasing firm value. The other major decisions of optimal capital structure and dividend policy are considered under this same goal. Additional topics include stock and bond valuation. Prerequisites: ECON4004, STAT4006, ACCT4100. 14 weeks

**FIN5201 CASE STUDIES IN CORPORATE FINANCE**

This course extends the discussion from FIN4200 of the theoretical financial issues facing the corporation. The student is exposed to a more in-depth presentation of the underlying financial theories and gains practice applying these theories to actual problems either through case analyses or additional readings. Prerequisite: FIN4200. 14 weeks

**FIN5203 INVESTMENT STRATEGIES**

Topics covered include investment principles, market behaviors and investment strategies. Students examine the types of risks associated with and the returns available from marketable securities. In addition to studying stocks and bonds, the course provides a risk-return analysis of alternative investment vehicles, such as options and futures. Views of investment professionals are presented to the class live and by video records. Prerequisites: FIN4200. 14 weeks

**FIN5205 REAL ESTATE FINANCE**

The objective of this course is to provide an introduction to and develop an understanding of real property finance and asset management. In order to accomplish this a working vocabulary and understanding of certain functional areas in real estate industry will be integrated into the course. The major functional areas include property analysis, structuring ownership, negotiation, development and management structure. There will also be an in depth look at the knowledge behind financial structure, physical plant, the people involved and the environment. The primary focus of this course is to provide a framework for decision making in real property business, taking into account all the functional areas. Prerequisite: FIN4200. Offered periodically. 14 weeks

**FIN5206 TAX STRATEGIES AND MANAGEMENT DECISIONS**

This course covers the fundamentals of individual and corporate taxation including an analysis of tax policy, structure, legal hierarchy and procedure, as well as a discussion of tax aspects of the various common forms of business organizations, and an examination of tax considerations in implementing employee benefit plans. The basic foundations of international tax are addressed. Cases emphasize the necessity of considering the impact of federal taxes in management decisions. Students perform a tax compliance and planning project. 14 weeks

**FIN5207 ADVANCED DERIVATIVES**

Although the quantity and complexity of derivative securities has exploded in recent years, there are basic mathematical tools that can be used to accurately place a value on any derivative, no matter how complex. This course focuses on learning these tools and understanding how they are applied to standard derivatives such as futures, options and swaps. The course will also focus on applying these tools to current financial engineering problems. Offered periodically. Prerequisite: FIN4200. 14 weeks

**FIN5208 FIXED-INCOME SECURITIES**

This course examines fixed-income securities like U.S. Treasury bills, notes, bonds, corporate bonds and mortgages and then analyzes some of the derivatives based upon these securities. The theory of valuation for fixed-income securities is presented along with models of the term structure of interest rates. Much of the course is devoted to using personal computers to model the term structure as a basis for valuation. Prerequisite: FIN4200. 14 weeks

**FIN5214 CORPORATE RESTRUCTURING**

Deciding when a corporate restructuring is necessary and managing the process has become an increasingly important skill for executives. The course will use cases and reading to demonstrate three types of restructuring: portfolio (changes in assets and lines of business), financial (changes in capital structure, debt and equity), and organizational (changes in organizational structure). The course will conclude with a case which is a leveraged buyout that will provide substantial tax savings with a change in financial structure. We will discuss the effectiveness of various analytical techniques used to value companies in corporate restructuring. The techniques include: discounted cash flow (DCF), weighted average cost of capital (WACC), capital cash flow and adjusted present value. This is a quantitative course and will use case discussions to demonstrate the concepts. Prerequisite: ACCT4100, FIN4200. Seven weeks



**FIN5281 CASE STUDIES IN INTERNATIONAL FINANCE**

The focus is on specific problems encountered by financial managers in corporations having international financial functions. Although international capital budgeting and financing in a global environment are covered, the major emphasis is on managing foreign-exchange risk. Prerequisite: FIN4200. 14 weeks

**FIN5301 STOCK AND BOND VALUATION**

This course provides an introduction to investment theory and security valuation. Surveys techniques for stock and bond valuation, including dividend discount models, capital-asset pricing models, multiple-stage growth and term structure models. Prerequisite: FIN4200. Seven weeks

**FIN5302 QUANTITATIVE TECHNIQUES FOR DERIVATIVES VALUATION**

This course focuses on methods of pricing options, futures contracts, forward contracts and swaps. Models include the binomial and Black-Scholes models for options and arbitrage-free models for forwards, futures and swaps. Prerequisite: FIN4200. Seven weeks

**FIN5303 FINANCIAL MODELING**

In this course students will implement financial models via the computer. The models are drawn from various finance areas such as corporate finance, fixed income securities, investments, and derivatives. The emphasis is not on the models, per se, but on the implementation. It is often true, however, that a complete understanding of the models comes through using them for computations. The models will be introduced through lecture and discussion. The idea is that students will leave the class fully capable of programming basic financial models in a spreadsheet. This training should prepare the student for many applications in the finance field. There appears to be a growing demand for people who have the practical skills of financial modeling. Since not all students will have the same finance background, however, another objective will be to fill in finance deficiencies in some small way as we discuss models from various areas. Thus, this course is the type of course that, perhaps, could just as easily be taught as a first course in finance or a last course in finance. In sum, students should be able to implement finance theory in spreadsheet models for a number of different practitioner applications. Prerequisite: FIN 4200. Offered periodically. Seven weeks

**FIN5304 GAME THEORY**

This half-term course examines the choices that we make which affect others and the choices others make that affect us. Such situations are known as games. Game theory has traditionally been a tool of economists, but its use in management situations is growing. Managers frequently play games both within the firm and outside it. Managers must account for the reactions of rival firms, subordinates, and superiors to the various proposals of the managers. The goal of this course is to enhance a student's ability to think strategically in interactive environments. Knowledge of game theory will give students an advantage in such settings. Prerequisite: FIN4200. Offered periodically. Seven weeks

**FIN5305 TECHNICAL ANALYSIS**

The focus of this course is how investors might use past market data to forecast future asset prices. This methodology is opposed to fundamental analysis, which depends on past accounting data for predictions of future prices. The class will examine popular methods of technical

analysis and try to forecast prices using these methods on actual data. Speculative trading techniques such as entering trades via various types of orders, protecting by stop-loss orders and pyramiding of positions will be presented. The course will discuss the fit of technical analysis into the efficient markets hypothesis and into current finance theory. This course is offered as a special topics class and counts as a finance elective in both the M.B.A. and M.S.F. programs. Prerequisite: FIN4200. Offered periodically. Seven weeks

**FIN5306 LEGAL ASPECTS OF CORPORATE FINANCE**

This course will cover the growing body of law on corporate finance and accounting issues in the wake of Enron and other recent corporate scandals. Fundamental concepts of financial accounting and valuation methods applied by corporations will be reviewed. Students also will be exposed to basic principles of corporate law. The course lectures will then delve into "aggressive accounting" issues at the heart of the corporate scandals and will examine the law's response to such issues. Corporate fraud laws will be examined as well as the legal protections for employees who "blow the whistle" on business crime. The course will conclude with exploration of whether the law can instill change in behavior in the corporate environment. Seven weeks

**FIN5309 FINANCIAL ECONOMETRICS**

This course provides a survey of common statistical techniques employed in financial research, including linear regression, factor models, time-series models and forecasting models. Prerequisite: FIN4200. Seven weeks

**FIN5310 CASE STUDIES IN DERIVATIVES**

The goal of this course is a thorough exploration of the risk-management process. This decision involves identifying and quantifying the risk to be transferred, selecting the means of transferring the risk and implementing the risk-management decision. Risk management is only partly a quantitative field. Strategy, negotiation, marketing and basic financial management are important as well. This course will focus on several important areas: (1) understanding the players in the market for financial risk; the buyers and sellers of risk, and the various intermediaries and (2) making a risk-management decision with only limited information about the true risks a firm faces. Offered periodically. Prerequisite: FIN4200. 14 weeks

**FIN5311 PORTFOLIO MANAGEMENT**

This course covers such topics as passive- and active-portfolio management, performance measurement, descriptions of investment companies, and diversification to include international investments and non-financial assets. Prerequisite: FIN5301 is recommended. Seven weeks

**FIN5312 FINANCIAL INDEXING**

Indexing has been at the heart of the transition of the investments profession from an art to a science. The study of indexing becomes very interesting when theory turns into practice. Index-based products are widely available whether they be the S&P 500, the Goldman Sachs Commodity Index or the Dow Jones Hedge Fund Strategy Benchmarks. In this course we will examine the theoretical and practical underpinnings of indexing. We will examine the benchmarks available for various asset classes and investment strategies and evaluate the performance of these benchmarks. Prerequisite: FIN4200. 14 Weeks

**FIN5900 MERGERS AND ACQUISITIONS**

The M&A course is a case-based course which will investigate the advantages and pitfalls of corporate transactions and the process followed for successful deals. There will be a team project of the student's choice to research and report on a recent transaction. Students should have completed the required finance courses before taking this course. As a result of taking this course, the student will better understand how deals materialize and create value for the shareholders, better understand the process followed in completing the transaction, will have negotiated an actual deal in class, and will appreciate the fact that once a transaction is signed, the hard work of making it successful will have just begun. Prerequisites: ACCT 4100, FIN 4200 preferred. Offered periodically.

**MGMT4301 CREATING EFFECTIVE ORGANIZATIONS: STRATEGIC DECISION MAKING**

This course focuses on the formulation and implementation of strategy at both the business and corporate level. Using an integrative approach that combines both the science and the art of strategy, the course introduces students to the tools that are used to assess an organization's internal and external environment, and to the process of strategic thinking. 14 weeks.

**MGMT4302 CREATING EFFECTIVE ORGANIZATIONS: LEADERSHIP**

This course is designed to provide students with the knowledge, skills and abilities needed to exercise leadership in today's global organizations. Students will gain the tools needed to lead organizational members towards the attainment of individual, team and organizational goals. Topics include establishing effective interpersonal relationships, managing cultural differences, motivating others, building and maintaining effective teams, exercising leadership and influence, creating effective organizational structures and processes, and managing change. Course readings and highly interactive classroom activities (case studies and exercises) will be used to enhance students' leadership skills. 14 weeks

**MGMT4701 ORGANIZATIONAL COMMUNICATION**

This course is designed to increase students' knowledge of the theory and practice of communication in organizations. Topics include interpersonal communication issues, including the effects of culture, status and gender, and organizational issues such as crisis communication and public relations. Much of the course is devoted to skill development, emphasizing both written and oral presentations. Seven weeks

**MGMT4707 INTERNATIONAL MANAGEMENT**

This course addresses core management issues from the international perspective. Business policy, competitive strategy, organizational and control mechanisms, business modes and operations are thus covered from the perspective of global business. Geographic diversity and geographical influences are at the heart of the global economy. The diverse cultural, economic and political environments facing the business manager are unique dimensions that make up the foundation of the new course. Prerequisites: ECON4004, MGMT4301, MGMT4302. Seven weeks

**MGMT4708 BUSINESS LAW**

This course provides complete coverage of business law with a focus on contemporary, ethical, international and technology issues. This course recognizes the importance of the application of court decisions, statutes and government regulation to business and making business decisions in a global market. Seven weeks

**MGMT4709 BUSINESS IN SOCIETY**

This course combines the study of business ethics with the consideration of business in its social, technological, political and natural environments. Personal values and their function in organizational settings are the focus of the first half of the course, while the second half examines corporate responsibility and stakeholder management in the international context. The emphasis throughout is on creative managerial decision making, with analytic and implementation skills developed through case discussion, case writing and class presentations. Seven weeks

**MGMT4712 INTERNATIONAL TRANSACTIONS**

This course is designed to elevate the knowledge and understanding of a variety of subjects contained inside the world of International Business Transactions. Some of these subjects include: world trade, international enterprises, treatment of "goods" in international markets, European Economic Community, business in Asia, regulations on imports and exports, currency exchange, international technology transfers, protection of intellectual-property rights, and litigation and arbitration in the international market. This course fulfills either the business-law requirement or a concentration elective (Management or Global Business) but cannot be used for both an elective and the law requirement. Seven weeks

**MGMT5302 MANAGING CHANGE AND CONFLICT**

Change and conflict are inevitable, as organizations enter the 21st century and face globalization, technological innovation, and demographic change. This course will address the challenge of managing conflict and change from a pragmatic perspective. Formal organization development interventions will be discussed, as well as the day-to-day changes that every manager experiences. Concepts such as employee involvement, organization culture, power and politics and the learning organization will be introduced and applied. Course requirements include planning an actual organizational change, oral and written case analyses and active participation. Prerequisite: MGMT4301, MGMT4302. Offered periodically. Seven weeks

**MGMT5304 NEGOTIATION AND CONFLICT RESOLUTION**

This skill-building course is designed to help students improve their negotiation and dispute-resolution techniques. Students will study the psychological concepts and theories of negotiation. They will also explore their own personal negotiation and conflict-resolution styles. The course relies heavily on the use of role-playing exercises, case studies and class discussions. Topics studied will include distributive and integrative bargaining, communication and persuasion, power, conflict and intergroup/international negotiation. Prerequisite: MGMT4302. Seven weeks

**MGMT5305 INDUSTRIAL RELATIONS**

Broadly defined, industrial relations refers to the relationships between employees and employers, through union representatives. This course serves as an introduction to the concepts, theories and practice of labor-management relations. Topics include: the development of the trade-union movement; union structure, government and growth; the practice of collective bargaining; the administration of the collective-bargaining agreement; dispute-resolution procedures; and the legal framework of labor relations. Seven weeks



**MGMT5306 DIVERSITY IN THE WORKPLACE**

The race and gender composition of the U.S. workforce has become increasingly diverse in recent years. Drawing on research in organizational behavior, psychology and sociology, this course explores the complex dynamics that underlie interpersonal interactions in diverse organizations. Students will examine the past and present experiences of members of different race and gender groups in the U.S. workplace. Finally, students will consider how organizations can manage diversity in a manner that fully utilizes the talents of all members of the workforce. Male and female students of all racial/ethnic backgrounds are encouraged to enroll. Prerequisite: MGMT4302. 14 weeks

**MGMT5308 WOMEN IN MANAGEMENT**

The course explores the position and role of women in the management of U.S. organizations. It focuses at the societal level on the representation of women in management and at the organizational level on gendered behavior. Topics are reviewed and discussed as enabling or hindering (1) women in performing to their capacity and (2) organizations in benefiting from women's contribution. The course draws on literature that describes and conceptualizes occupational segregation and its causes, as well as different management styles and their relevance to management in general and to women in management in particular. The course uses a woman-focused lens to reflect on the practice of management, societal expectations, and organizational policies and behaviors. Seven weeks

**MGMT5401 THE CONTEMPORARY WORKPLACE**

This course examines contemporary issues in employment. Topics include downsizing the workforce, discrimination in selection and employment, sexual harassment, employee rights and responsibilities, the employment of part-time, temporary and home workers, new forms of compensation, the frontiers of union organizing, and human-resource management in the global economy. Through the discussion of selected readings and cases as well as class debates, students develop an appreciation of the complexity and importance of these and other emerging issues. Offered periodically. Seven weeks

**MGMT5402 DISCRIMINATION IN EMPLOYMENT**

This course examines inappropriate and illegal discrimination in the contemporary workforce. Topics include discrimination in recruitment, selection and promotion, sexual harassment, the glass-ceiling effect and discrimination in compensation. Through the discussion of selected readings and cases as well as class debates, students develop an appreciation of the complexity and importance of these and other emerging issues. Seven weeks/Offered periodically

**MGMT5406 COLLECTIVE BARGAINING**

Collective bargaining is a process by which representatives of labor and management seek agreement on the terms and conditions of employment. The public often has a vested interest in the process, especially when conflicts over terms of employment cannot be resolved at the bargaining table. Topics covered include the evolution of bargaining, theories of bargaining power and behavior, and the impact of the law on the conduct and substance of bargaining. The range of bargaining issues is described, along with variations in bargaining structures. The grievance procedure is examined with respect to the application and interpretation of collective agreements. Students participate in a negotiation simulation and a collective-bargaining simulation. Offered periodically. Seven weeks

**MGMT5407 INTERNATIONAL LABOR RELATIONS**

This course provides an international perspective on labor relations by comparing labor-union activities, nonunion forms of worker representation and labor legislation in several countries. Topics include collective bargaining and wage determination, union growth, labor disputes, protection against unfair dismissal, grievance procedures and employee participation in management decision making. National trends are examined and compared through readings, case studies and presentations. Seven weeks

**MGMT5408 CREATIVITY, LEADERSHIP AND THE ARTS**

This course examines the benefits of interdisciplinary thinking as a means of developing and improving creativity and leadership skills. The emphasis is on the arts and how they can be used to significantly enhance business decision-making and effectiveness. Through readings, activities, and case analyses, students develop a greater appreciation and knowledge of their own interdisciplinary thinking skills and how these skills can be used in business settings. Offered periodically. 14 weeks.

**MGMT5505 GREENING THE CORPORATION**

When it comes to the natural environment, organizations have come under increasing scrutiny from a wide variety of stakeholders. How to manage organizational ecological and sustainability issues needs to consider these multiple stakeholders. Organizations may respond in a number of ways including proactive and reactive programs. This class will investigate the types of ecological pressures organizations face and how the organization can effectively respond to these pressures. We include issues that will be faced by the various organizational functions including accounting, finance, marketing, operations and human resource management dimensions. Offered periodically. Seven weeks

**MGMT5543 PROJECT MANAGEMENT**

The course will cover tools and techniques necessary for successful completion of projects. Students will learn about project management concepts, needs identification, proposed solutions, risk assessment, project planning, scheduling, project control techniques, project team issues, communication, documentation and project management software. Seven weeks

**MGMT5604 SERVICES MANAGEMENT**

This course provides students with the concepts and tools necessary to manage service operations effectively. The strategic focus should also provide students with the foundation to start their own service business. The course explores the dimensions of successful service firms, prepares students for enlightened management and suggests creative entrepreneurial opportunities. Beginning with the service encounter, service managers must blend marketing, technology, people and information to achieve a distinctive competitive advantage. This course looks at service management from an integrated viewpoint with a focus on customer satisfaction. The material will integrate operations, marketing, strategy, technology and organizational issues. Offered periodically. 14 weeks

**MGMT5606 LEARNING BY ANALOGY**

This course will use a variety of mediums (movies, art, literature, nature, poetry and music, among others) to explore management concepts. Students will be required to make presentations in each class session using the assigned medium as a basis for examining how organ-



izations and the people in them function. The course focuses on developing an ability to think creatively about management and draw lessons from multiple venues. Prerequisite: MGMT4301, MGMT4302. Offered periodically. Seven weeks

#### **MGMT5609 SPIRITUALITY AND BUSINESS**

There has been a recent explosion of books, tapes and videos on the topic of spirituality and business. At their roots are the beliefs that: (1) everyone is spiritual for we are composed of mind, body and spirit; (2) everyday business life has gone stale for many people because their spirit is not engaged in what they do; and (3) engaging our spirit at work will improve our relationship to what we do and to each other, and ultimately, will improve the bottom line. The course explores this concept through readings and discussions of spirituality in the context of the individual, work group and organization. It is different than other courses in that we will engage in spiritual, nonsectarian practices and rituals during class sessions. There are no prerequisites for this class other than an open mind. This course is offered as a special topics class and counts as a free elective in the M.B.A. program. Offered periodically. 14 weeks

#### **MGMT5782 DOING BUSINESS IN NORTHERN EUROPE**

This is a course offered at Vaxjo University in Sweden. Students attend the course for approximately one month in late spring. Students earn one course unit and will study topics covering the business environment and business practices in northern Europe. Lectures, discussion seminars and company visits are the format of this course. Students are graded through presentation and discussion of a written report on a subject related to the content of the program. Information sessions are held each spring semester. Contact GSOM academic affairs for more detailed information.

#### **MGMT5783 GLOBAL BUSINESS SEMINAR**

This intensive course combines lectures, readings and discussion at Clark University with a week of instruction by Clark faculty and resident business executives and guest lecturers in a foreign city. Current global business events are examined in the context of economic and political policy and management experience. Several class sessions are held on campus, followed by a week of seminars and field trips in a foreign center of commerce. Prerequisites: required core courses. Also offered as CAP5783/CAP5883. 14 weeks

#### **MGMT5784 ADVANCED TOPICS: GLOBAL TEAMS**

Advanced Topics in Teams explores the intriguing and challenging issues surrounding the use of teams in today's global organizations. This elective course goes beyond the introductory material covered in the managing-teams module of Creating Effective Organizations (CEO). It focuses on the challenges faced by global teams comprised of members from different regions of the world, as well as by virtual teams that rely primarily on electronic rather than face-to-face interaction. The course is designed to give you the skills needed to build and maintain effective global/virtual teams. Course topics include designing global/virtual teams, managing interpersonal processes and conflict within global/virtual teams, and using technology to enhance team performance. Class meetings will be highly interactive; activities will include case discussions and two virtual (electronic) team exercises. The course is included in the Global Business Concentration. Prerequisite: MGMT4302. Offered periodically. Seven weeks

#### **MGMT5792 MANAGEMENT CONSULTING PROJECTS**

This course is organized around projects provided by a variety of profit and nonprofit organizations in central Massachusetts and Boston. Teams of three to four second-year M.B.A. students are invited to work in these organizations as consultants in training. Working with guidance from Clark faculty members and managers from the host organizations, the student teams analyze their assigned projects and recommend courses of action. Management, in turn, critically evaluates and responds to the students' analysis and recommendations, in much the same manner that they respond to proposals from their own staff. Prerequisites: required core courses. Also offered as CAP5792. 14 weeks

#### **MGMT5802 ENTREPRENEURSHIP: SOCIAL IMPACT**

This course is aimed at providing individuals with the concepts and skills to recognize opportunities that others have overlooked, and to have the insight and knowledge to act where others have hesitated. The course is a product of experience—nearly two decades of research in this field and refinement in the classroom—and is rooted in real-world application. Major areas of concentration will include: opportunity identification and evaluation, forming the entrepreneurial team, managing resources, developing a business plan, financing the business and assessing entrepreneurship from a personal perspective. Prerequisites: required core courses. Also offered as CAP5802. 14 weeks

#### **MGMT5806 TURNAROUND MANAGEMENT**

The class will address challenges faced by struggling companies that are in or headed towards financial distress. They could be public or privately held, stand alone or divisions of larger companies. These companies were once successful but due to a variety of factors have lost their way. We will examine the 5 stages of a turnaround: stopping the bleeding, introducing stability, creating upward mobility, finding the "sweet spot" of the business and methods to avoid heading back towards financial and strategic problems. The class will deal with the financial, operations and marketing options to drive the turnaround. The student will learn specific techniques to improve cash, earnings, efficiency and customer satisfaction. We will also focus on the process of change management. These steps are critical as the business techniques and involve: developing throughout the organization a sense of urgency, creating and communicating a vision, empowering others to act to drive improvement and sustaining the process. The course will use case studies and readings and require participation in class discussions by all students. Prerequisites: ACCT4100, FIN4200, MGMT4301. Offered periodically. Seven weeks

#### **MGMT5807 CROSS CULTURAL MANAGEMENT**

This course is aimed at helping students to develop the knowledge and skills required to manage effectively in a culture different from their own, as well as to interact with people from other cultures. The class will introduce the main concepts of culture and discuss the various cultural frameworks and then teach how to apply these to determine how to be effective while interacting in different cultural environments. The class will examine the impact of culture on various behaviors as well as interpersonal issues like communication and negotiation, motivation, leadership, expatriate management and team management in an international context. Offered periodically. 14 weeks.

#### **MGMT5900 CORPORATE INTELLECTUAL PROPERTY**

This course is designed to teach students the concepts and components of intellectual property and the necessity of protection in busi-



ness. We will immediately begin to garner an understanding of how modern business and law are influenced and impacted by the ever present development and protection of technology in the form of intellectual property around us. The course will increase students' understanding of critical concepts and prepare them to recognize and protect patent, copyright, trade secret, trademark, service mark and other valuable developments in worldwide business. This course is designed to assist in managing the value of intellectual property in our daily decision making. Offered periodically. Seven weeks

#### **MIS4500 MANAGEMENT INFORMATION SYSTEMS**

One of the most important aspects of computing, management information systems has had a significant effect on both operations and strategy. Information systems are employed at all levels of management to achieve competitive advantage and to create new opportunities, products and services. The objective of this course is to provide basic knowledge of the field of information systems. Topics include hardware, software, database management, data communication, systems analysis and design, and functional application areas such as medicine, accounting and manufacturing. 14 weeks

#### **MIS5501 DATABASE MANAGEMENT SYSTEMS**

Database management systems play an important role in meeting the information needs of an organization. A poorly designed database may result in providing incomplete, wrong and anomalous information. The primary objective of this course is to study the techniques used in designing databases that provide the correct information to nontechnically oriented users. Other topics include distributed databases and expert systems. Prerequisite: MIS4500. Seven weeks

#### **MIS5505 MANAGEMENT OF INFORMATION TECHNOLOGIES**

Designed to cover the theory and practice of planning and managing the information systems function for strategic organizational planning and competitive positioning. This course includes the interaction of corporate and information systems management and the strategic position of information systems in a variety of commercial and manufacturing enterprises. Students will also consider technological consequences of the development of information policies and the affect on overall organizational decision making. Prerequisite: MIS4500. 14 weeks

#### **MIS5506 KNOWLEDGE MANAGEMENT IN ORGANIZATIONS**

Participants in this course will have the opportunity to study the behavioral, social, organizational, managerial and technical aspects of knowledge management and organizational learning, as well as practical applications of knowledge management systems within organizations. Knowledge management has been considered as a strategy for improving organizational performance through a set of processes, tools, and incentives in order to create, share, and integrate knowledge among individuals, teams, and organizations. While professional service firms were the first to embrace the idea, KM efforts are now underway in virtually every industry. A wide variety of knowledge-centered initiatives fall under the KM umbrella. This course therefore intend to: (I) understand what KM is and how it can be used to improve organizational performance; (II) outline various IT solutions to facilitate the creation and sharing of explicit/tacit knowledge; and (III) explore the challenges associated with deploying these solutions and identify strategies and tactics for addressing these challenges. The course is participatory, and, as such, students will engage in active learning through discussion, simulation and case studies.

#### **MIS5507 E-COMMERCE**

This course focuses on the explosive field of Electronic Commerce. "E-commerce" is the buying and selling of goods and services on the Internet, especially the World Wide Web. This class is a complete introduction to the world of electronic commerce, including balanced coverage of technical and business topics. Case studies and plentiful business examples complement conceptual coverage to provide a real-world context. Implementation strategies are analyzed, using examples of both successful and unsuccessful implementations. Focuses on commercial applications of new media technologies. Beginning with an overview of the current use of the Internet in commercial settings, it then turns to the costs and benefits of these applications and suggest appropriate hardware and software for various purposes and will offer practice in the creation of modules and applications. Topics include wireless programming, authoring modules, training applications, product education and support, on-line payment strategies and E-commerce business solutions drawn from companies successfully offering E-business solutions. Prerequisite: MIS 4500. 14 weeks

#### **MIS5513 DATA SECURITY AND PRIVACY**

Begins with an introduction to the basic concepts of data security both physical and logical. It continues with dealing with data security standards, the SSL and S-HTTP protocols; data integrity; data encryption; coding methods; the use of smart cards; assurances of financial transactions, payment methods of e-business and e-commerce; medical information security; and legal aspects of information security. Prerequisite: MIS4500. 14 weeks

#### **MIS5523 OPERATING SYSTEMS**

Developed as an introduction to operating systems' characteristics, designs and structures. Topics include a history of operating systems, concurrent processes and synchronization, coordination or asynchronous events, file systems, scheduling, deadlock resolution and memory management. Prerequisite: MIS4500. 14 weeks

#### **MIS5533 DESIGN AND ANALYSIS OF COMPUTER NETWORKS**

Designed as an overview of LAN/WAN; encoding digital and analog signals, asynchronous/synchronous protocols; ISDN, B-ISDN, TCP/IP, with a focus on modeling and analysis of networks and network protocols. Prerequisite: MIS4500. 14 weeks

#### **MIS5543 PROJECT MANAGEMENT**

Analyzes the most important aspects of project management within the framework of organizational behavior and structure that can determine project success: the planning, scheduling, and controlling process vital to effective project management. Students will be required to learn to use Microsoft Project 2000 +, including planning a project, creating project schedules, communication, project information, using the critical path, assigning resources, tracking progress, and sharing information across applications and the Web. Access to Microsoft Project software required. Prerequisite: MIS4500. Seven weeks or 14 weeks

#### **MIS5553 INFORMATION SYSTEMS ANALYSIS AND DESIGN**

Despite all of its current and future technological capabilities, the computer still owes its power and usefulness to people. Business people define the business problems to be solved by the computer. Computer programmers and technicians apply information technology to build information systems that solve those problems. Systems Analysis and Design is the study of a business problem domain to recommend



improvements and specify the business requirements for the solution through the specification or construction of a technical, computer based solution. Prerequisite: MIS4500. 14 weeks

#### **MIS5573 BUSINESS INTELLIGENCE**

As business leaders, consuming and creating information is a constant activity yet we often take information for granted. This course will focus on how we can improve the amount and quality of information available and how information is put to use to improve competitive positions. The student will develop an understanding of business processes that drive information use, the challenge to obtain and the benefits of quality information, and the methodology and challenges of implementing Business Intelligence tools for the enterprise.

#### **MIS5583 SPECIAL TOPICS: IT FOR BUSINESS ANALYST**

The IT Business Analyst is one of the fastest growing roles in the IT industry. Business Analysts are found in almost all large organizations and are important members of any IT team whether in the private or public sector. This class will provide a clear, step-by-step guide to how the Business Analyst can perform his or her role using state-of-the-art object-oriented technology. Assuming no prior knowledge of business analysis, IT, or object-orientation, material will be presented in a narrative, chronological, hands-on style using a real-world case study. Upon completion of the course, you will have created an actual business requirements document using all of the techniques of object-orientation required of a Business Analyst. This course puts together all of the technology pieces needed to proficiently perform the Business Analyst role.

#### **MIS5602 DECISION SUPPORT SYSTEMS**

Optimization modeling techniques can potentially be used to address a wide range of management problems. Application of these techniques in today's business environment requires robust, microcomputer-based software to solve the models. In this course, students learn various optimization modeling techniques; software for solving models; and cases of how companies have developed and used optimization-based decision support systems to address real-world problems. Prerequisite: OM4601. Seven weeks

#### **MIS5604 WEB-SITE DEVELOPMENT**

This course covers all aspects of Web-site design, from creative design to professional management. Electronic commerce issues will be looked at in-depth. Students will work with and learn HTML and Java Scripting, including the introductory components of CGI and Web Site Pro server hosting software. Students taking this class will need to have Web-server access with a minimum of 2 MB hosting space available through their ISP and should be familiar with personal computers. All work will be done using the Windows 95/98 operating systems. This course is offered as a special-topics class and will count as an elective in the MIS concentration. Prerequisite: MIS4500. 14 weeks

#### **MKT4400 MARKETING MANAGEMENT**

This course provides the fundamental marketing principles and practices underlying a successful business enterprise. Students will learn the tools, concepts, analytical frameworks and skills for making marketing decisions and designing marketing programs. The course covers the processes and activities involved in effective marketing, as well as the strategic implications of being market driven. A fundamental goal of the course is to improve students' critical-thinking and decision-making

skills by requiring students to make and defend marketing decisions in the context of realistic, case-oriented problem situations. Topics include: segmentation, targeting, positioning, competitive strategy, product development, pricing, promotion and distribution. Prerequisites: ECON4004, STAT4006. 14 weeks (Required core course for all MBA students who did not receive a waiver in marketing.)

#### **MKT4402 MARKETING STRATEGY AND SIMULATION**

This course utilizes a computer simulation to provide direct, hands-on experience of managing a business. Students apply concepts and strategies learned in prior marketing course work to a practical, real-world environment. Students will come to appreciate the importance and value of marketing as the primary competitive tool and will gain direct exposure to the opportunities, challenges, problems and decisions involved in market-driven management. They will also learn the importance of making trade-offs in finding the optimal combination of marketing mix elements (and product/inventory decision) necessary to run a successful business enterprise. Experiential learning from the competitive game may be supplemented by case discussions and readings on competitive marketing strategy development. Prerequisite: waiver in Marketing. Seven weeks (Required core course only for MBA students who received a waiver for MKT4400.)

#### **MKT5401 MARKETING RESEARCH**

This course examines the basic concepts and techniques used in marketing research as a problem-solving aid in decision making in marketing. Problem definition, research design, types of information and measurement scales, and evaluation and utilization of secondary data with emphasis on electronic access are discussed. Students are trained in the basic methods of primary data collection, including structured and unstructured interviews, focus groups and surveys. Practical and intensive applications on sample size, questionnaire design, data analyses and interpretation are emphasized, as well as discussion of advanced multivariate techniques for inputting and analyzing data using the SPSS statistical package. Prerequisite: MKT4400 or MKT4402, STAT4006. 14 weeks

#### **MKT5402 CONSUMER AND INDUSTRIAL BUYER BEHAVIOR**

Understanding consumer behavior is essential to defining and maintaining a market. This course examines the purchasing behavior of individuals and groups. Topics include: complex decision-making models, buying habits, attitude theory and the buying behavior of organizations. Prerequisite: MKT4400 or MKT4402. Seven weeks

#### **MKT5403 ADVERTISING AND PROMOTION**

Promotion, a component of the marketing mix, is any form of communication intended to inform, persuade or remind people of products or services. Advertising is any form of impersonal communication of ideas, goods or services paid for by an identified sponsor and is one of the major types of promotion. The course focuses on advertising and publicity as the most common and useful forms of promotion. The course integrates international, legal and ethical aspects of promotion and covers topics such as media selection, public relations and personal selling. Prerequisite: MKT4400 or MKT4402. Seven weeks

#### **MKT5405 BUSINESS-TO-BUSINESS MARKETING**

Organizations that market to other organizations encounter different problems than those that market to consumers. Business-to-business marketing is the marketing of goods and services to commercial enterprises, governments and nonprofit institutions. Emphasis is on the



buyer behavior and the more complex decision-making processes of organizations. Topics covered include industrial market segmentation, product development, pricing, personal selling, promotion and distribution. Additional topics are direct marketing, research and development, purchasing and corporate planning. Prerequisite: MKT4400 or MKT4402. Offered periodically. 14 weeks

#### **MKT5406 MARKET PRICING**

A pricing strategy should be consistent with and reflect overall company objectives. Companies can use pricing strategies to gain market share, meet profit goals or maintain the status quo. Companies may pursue more than one pricing objective at the same time and often re-examine pricing strategy in light of changes in the competitive environment. This course presents a management approach to pricing products and services in consumer, industrial and reseller markets. Topics include: bargaining tactics, bidding strategies, pricing product lines for complex channels of distribution, life cycle and learning-curve pricing, and intrafirm transfer pricing. Prerequisite: MKT4400 or MKT4402. Offered periodically. Seven weeks

#### **MKT5407 SERVICES MARKETING**

Highly competitive markets for profit and nonprofit service organizations require strict attention to the production/marketing interface, as well as to the traditional marketing mix. The course focuses on the marketing implications of service intangibility, the inseparability of production and consumption and conflicting server roles. These problems apply to a wide array of service organizations, including retailing and health care. Current models of the service organization are presented with insight developed through readings, cases and interviews. Prerequisite: MKT4400 or MKT4402. Offered periodically. 14 weeks

#### **MKT5482 INTERNATIONAL MARKETING**

This course examines the problems that firms encounter as they enter international markets. The text and readings explore marketing problems facing joint venture and multinational firms, as well as the exporter and licensor. A range of marketing activities is covered in the context of international operations, including marketing research, product policy, pricing, distribution, promotion, planning, organization and control. Prerequisites: MKT4400 or MKT 4402. 14 weeks

#### **MKT5485 PERSONAL SELLING/SALES MANAGEMENT**

This course provides an overview of the fundamental theory and principles underlying the personal selling process, as well as sales management. Through numerous "role plays," in-class exercises, and a sales management simulation, emphasis will be placed on the practical application of this theory to real-world marketing situations. The learning environment will involve both individual (role-plays; in-class exercises) and group (simulation) settings. The first class period will be an introductory session. You will be exposed to both fundamentals of personal selling and the sales management process. The second class period will be devoted to an examination of the sales management process in detail. Students will also be divided into teams and exposed to the MARS Sales Management simulation (available on-line at [shootformars.com](http://shootformars.com)). Approximately 45 minutes of each class period thereafter will be devoted to working (in groups) on the sales management simulation. The remaining class time (class periods 3-7) will be devoted to the personal selling process. Thus, in this class a greater emphasis is placed on developing individual personal selling skills than on managing a sales force. Prerequisite: MKT 4400 or MKT 4402. Offered periodically. Seven weeks

#### **MKT5486 BRANDING STRATEGIES**

Brands are everywhere. Name a product category and a brand name is likely to be the first thing that comes to mind. These brands do not merely mark the origins of the companies, products and services. They elicit our most deeply held beliefs, desires and aspirations. A strong brand can be a company's most effective competitive tool and strongest platform for growth, commanding premium prices among customers and investors alike. Branding building has many dimensions: aesthetic, experiential, social, financial, organizational and cultural. In this course, students will explore the dimensions of brands, and examine the process by which great brands are created, built and maintained. Prerequisite: MKT 4400 or MKT 4402. Offered periodically. 14 weeks

#### **MKT5494 PRODUCT MARKETING**

The objective of this course is to prepare students to be effective product managers. Corporations often sell hundreds of individual and related products by giving marketing responsibility to product managers. Product managers are the champions of their product line; they develop marketing plans, see that they are implemented, monitor results and take corrective action. This course develops conceptual and decision-making skills in marketing planning, product development and modification, product positioning and promotion, forecasting and budgeting. Prerequisite: MKT 4400 or MKT 4402. Offered periodically. 14 weeks

#### **OM4601 OPERATIONS MANAGEMENT**

Operations management involves the efficient use of resources to create goods or services that satisfy the needs of customers and clients. In both the profit and nonprofit sectors, successful management requires economically rational decisions regarding the design and operation of processes that transform such resources into goods or services. The course develops students' abilities to identify and structure operating problems and to identify appropriate techniques for resolving them. Examples of topics covered include: modeling concepts and LP modeling/solution methods, basic forecasting methods, location selection, inventory management, MRP, JIT, quality management/assurance, project management and control. Prerequisites: STAT4006, MIS4500. Seven weeks

#### **STAT4005 STATISTICAL METHODS**

This is a first course in applied statistics. No prior knowledge of statistics is assumed. The course is divided into two sections. The first section covers the basics of data analysis and presentation, probability theory and applied probability. The second section covers confidence tests and statistical regression. There are exams after each section. Seven weeks

#### **STAT4006 MANAGEMENT DECISION MODELS**

This course focuses on model building using multiple regression analysis. The resulting models are used to aid management decision making. Exercises and cases involve a wide range of management problems. Prerequisite: STAT4005. Seven weeks

## MATHEMATICS

### Program Faculty

Lawrence Morris, Ph.D. - *Chair*

Jerry Breecher, Ph.D.

Frederic Green, Ph.D.

Li Han, Ph.D.

David Joyce, Ph.D.

Lee Rudolph, Ph.D.

Natalia Sternberg, Ph.D.

Ping Xuan, Ph.D.

### Visiting Faculty

Herman Servatius, Ph.D.

### Emeriti Faculty

John Kennison, Ph.D.

### Program Overview

The department supports undergraduate majors and minors in computer science and in mathematics. The computer science program is described in the computer-science portion of this catalog. The department also offers courses that play an important role in other disciplines.

In keeping with liberal-arts traditions, Clark's mathematics major provides a solid education in mathematical principles for students who wish to apply mathematics in other fields and students who wish to pursue mathematics in graduate school. Clark mathematics majors have gone on to graduate school in pure mathematics, applied mathematics and computer science at such universities as Brown, Cornell, NYU (Courant Institute), and Stonybrook. Graduates are employed in the public and private sectors as statisticians, mathematical modellers and actuaries, as well as teachers from the elementary to university level.

The mathematics major, built around a core of fundamental courses, is best started early with calculus (MATH120-121 or MATH124-125) in the first year. Advanced electives provide some flexibility and allow students to tailor the major to their needs.

### Requirements

Department faculty are eager to help students select courses. If a major has not been declared earlier, it must be declared by the end of the sophomore year. Students should choose an academic adviser from the department faculty as early as possible, and in any case by the end of the sophomore year. Entering students enrolled in first-year seminars in programs outside mathematics, computer science or the natural sciences are especially encouraged to make a prompt choice of an unofficial secondary adviser in the Mathematics Department, who will be able to supplement the advice offered by their primary adviser.

### Core Courses

These courses are prerequisites for the advanced courses and should be taken as soon as possible.

Calculus sequence (MATH120-121-122 or MATH 124-125)

MATH130 Linear Algebra

MATH131 Multivariate Calculus  
MATH 172 Introduction to Modern Analysis

### Breadth Courses

MATH225 Modern Algebra

Two math electives (MATH105, 114, 115, or any courses beyond MATH125)

### Depth Courses

Four additional courses at the 200 level, one a capstone course to be selected with the major adviser (internships and reading courses will meet this requirement only with departmental approval.)

(Total of 12 or 13 courses, depending on student's choice of calculus sequence. Note: MATH110 Diving into Research cannot be used to satisfy the requirements of the major.)

### Suggested Specializations in Mathematics

Pure mathematics is the study of mathematics as an end in itself. Many students are originally attracted to mathematics because of its powerful applications, but a taste for pure mathematics often develops after studying the subject. Students planning to study mathematics in graduate school should consider programs in either pure or applied mathematics. Suggested courses: MATH214 Modern Analysis; MATH216 Complex Analysis; MATH226 Modern Algebra II; and MATH228 Topology.

Applied mathematics is the study of mathematics as applied to the natural or social sciences. The heart of the field is modelling—translating aspects of natural or social phenomena into mathematical objects that can be studied with such mathematical tools as differential equations, linear systems and stochastic processes. Suggested courses: MATH212 Numerical Analysis; MATH214 Modern Analysis; MATH216 Complex Analysis; MATH217-218 Probability and Statistics and Topics in Statistics; and MATH244 Differential Equations.

Actuarial science is the study of finance and insurance. Study in this field requires a grounding in mathematics and statistics and an understanding of economics and business management. Suggested courses: MATH212 Numerical Analysis; MATH217-218 Probability and Statistics and Topics in Statistics; MATH244 Differential Equations; and appropriate courses in economics or business management.

### Secondary Education Certificate in Mathematics Education

Certificate requirements include courses in education and in mathematics. Consult the Education Department for information on required courses in education and the most recent state guidelines. The mathematics department recommends the completion of a regular mathematics major, with MATH126 Elementary Number Theory and MATH128 Modern Geometry included as the two elective Breadth Courses.

### Mathematical Services

The mathematics department offers courses to help students using mathematics as a tool for studying other areas; see MATH113 Mathematical Problem Solving and MATH217-218 Probability and Statistics, and Topics in Statistics. Outside the department, COPACE offers IDND017 Foundations of Quantitative Thinking.

### Calculus

Calculus is an essential tool for every serious student of mathematics or the natural sciences. It also is used in economics and other disciplines. The Department of Mathematics offers two calculus tracks: MATH120-121-122 and MATH124-125



Both tracks are open to first-year students with appropriate scores on the placement test. MATH124 is geared towards students who have had prior experience with (regular and AP) calculus. Strong students in the physical sciences are urged to start with MATH124. The Mathematics Department generally recommends that even students with a high AP score take MATH124. In exceptional circumstances, first-year students may enroll in MATH130.

### Mathematics Placement Test

All students who intend to take mathematics courses or who need to satisfy the University's mathematics proficiency requirement (with the exception of students with advanced-placement credit in calculus) must take the mathematics placement test given during orientation and preregistration. Based on placement test scores, some students will be required to pass IDND017 Foundations of Quantitative Thinking, offered through COPACE before they enroll in a formal-analysis course. Other students, who place at levels ranging from precalculus through MATH124, must begin in a course corresponding to their placement test scores. This course must not be higher or lower than the test score indicates. Students may challenge their placement by taking backup placement tests. (For more information about the University's mathematical and quantitative-thinking requirements, see page 6.)

### Reading Courses

Reading courses on special topics may be arranged with the permission of a member of the departmental faculty who will serve as supervisor. Departmental policy requires that a reading course can only be taken Pass/No Credit. Reading courses may not be substituted for 200-level courses to fulfill departmental requirements

### Honors Program

A major who maintains at least a 3.2 average (4.0 scale) in courses required for the major may apply for the departmental honors program. A student's application in writing must be directed to a prospective honors adviser or the department chair by the end of the student's junior year. Honors may be achieved in one of two ways:

1. A unified four-course sequence as a senior (some parts of which may consist of reading courses), followed by a comprehensive examination.
2. An honors project to be presented at an oral defense or at a department seminar. This project may be an independent or joint research thesis, or it may be a programming project. Supporting course work may be required. Students interested in pursuing the honors program should consult their department adviser. The student registers for MATH299, Sec. 8, for course credit for an honors thesis.

Upon satisfactory completion of the program, the department may recommend graduation with honors, high honors or highest honors.

### Mathematics Minor

The mathematics minor consists of the following: calculus sequence (MATH120-121-122 or MATH124-125); MATH130 Linear Algebra; MATH131 Multivariate Calculus; and two other mathematics courses (excluding MATH113 and MATH119), at least one of which must be 200 level. (Reading courses and internships are accepted only with departmental approval.) The two elective courses depend on the student's interest. For instance, a student interested in the physical sci-

ences could take MATH172 Introduction to Modern Analysis and MATH244 Differential Equations, while MATH217-218 Probability and Statistics, and Topics in Statistics might be more appropriate for social sciences. See the department for further suggestions. Total: six or seven courses, depending on student's choice of calculus sequence.

### Courses

#### MATH101 CONCEPTS IN ELEMENTARY MATHEMATICS

This is a two-semester sequence designed for students interested in teaching elementary and middle school levels. The importance of mathematics education at the elementary school level cannot be emphasized enough. This is where the stage is set for a child's future success or failure in mathematics and the sciences. Proper mathematics instruction unifies different aspects of education such as listening and reading comprehension, oral and written expression, logical and critical thinking, problem solving skills, focusing on a task and developing work ethics and discipline. In teaching mathematics, an elementary school teacher faces great challenges. First, the developmental level of the students imposes natural restrictions on what can be taught and when. Second, mathematics can be understood only when a certain logical sequence is followed, when the knowledge is gradually built up, and constantly used and reinforced until it becomes "second nature". Third, a child has to be given the proper tools to succeed, in order to keep the level of frustration to a minimum. Although this course touches on all these different aspects of teaching mathematics, the emphasis is on understanding the main ideas of elementary mathematics, the logic behind the algorithms, the development of mathematical intuition, the proper sequencing of the topics, and the understanding of how mathematical concepts fit together, what they are based on and where they lead.

#### MATH105 HISTORY OF MATHEMATICS/LECTURE, DISCUSSION

Explores major themes—calculation, number, geometry, algebra, infinity—and their historical development in civilizations ranging from the antiquity of Babylonia and Egypt through classical Greece, the Middle and Far East and then modern Europe. Analyzes the tension between applications of mathematics and the tendency toward formalism. Emphasizes presentations and discussions. Fulfills the Historical Perspective. Mr. Joyce/Offered periodically

#### MATH110 DIVING INTO RESEARCH: RIGIDITY AND GEOMETRY

In elementary geometry you have learned the SSS Theorem: Given two triangles in the plane, if the three corresponding sides of the triangles have the same length, then the two triangles are congruent. This simple theorem has the practical consequence that triangles cannot be distorted, and for that reason triangles are a fundamental unit in many rigid structures. Just check out the Eiffel Tower. While engineers have been building such rigid structures successfully for centuries, the mathematical theory underlying them is not yet complete. In our Diving into Research class we will examine the connection between rigidity of engineering structures and elementary mathematics. We will use the example of rigidity to introduce new mathematical ideas from geometry, algebra, and combinatorics. We will survey the state of current research and identify where new questions are waiting to be answered. This is not a course in engineering, but the mathematics behind engineering. The object of the course is to both see mathematics you already knew in a new context, as well as to introduce new mathematics in a practical, intuitive, and geometrically pleasing set-

ting. There are no prerequisites. This is a 1 credit course with 0.5 credit each semester. Math 110 is intended for freshmen and Math 111 is for upperclassmen. Many people take Math 110 along with another First Year Seminar.

**MATH111 DIVING INTO MATHEMATICAL RESEARCH**

See Mathematics 110.

**MATH113 MATHEMATICAL PROBLEM SOLVING/LECTURE, WORKSHOP**

Intended for students who will use mathematics in such subjects as management and the social sciences, but who are not necessarily planning to go on to calculus. MATH113 cannot be used as a prerequisite for either calculus sequence, and does not satisfy any requirement of either the major or the minor in mathematics or computer science. Covers some precalculus topics (algebraic manipulations, functions and graphs, exponentials and logarithms), but major emphasis is on mathematical analysis of concrete situations (word problems, mathematical modeling, exponential growth, applications of linear systems, elementary probability). Prerequisites: A suitable score on the mathematics placement test. Staff/Offered every semester

**MATH114 DISCRETE MATHEMATICS/LECTURE**

Covers mathematical structures that naturally arise in computer science. Includes elementary logic and set theory, equivalence relations, functions, counting arguments, asymptotic complexity, inductively defined sets, recursion, graphs and trees, Boolean algebra and combinatorial circuits, finite state automata, and diagonalization and countability arguments. Emphasizes proofs and problem solving. Prerequisite: One semester of calculus (MATH120 or 124) or CSCI120. Mr. Chou, Mr. Green, Mr. Joyce/Offered every semester

**MATH119 PRECALCULUS MATHEMATICS/LECTURE, DISCUSSION**

Intended for students who plan to go on to calculus. MATH119 is to be used, when necessary, as preparation for MATH120 or MATH124 and does not satisfy any requirement of either the major or the minor in mathematics or computer science. Students should have a solid grasp of elementary algebra. Covers more advanced algebraic techniques (linear and nonlinear inequalities, quadratic equations, linear systems) and gives a rigorous look at elementary functions (polynomial, exponential, logarithmic, trigonometric). Prerequisites: A suitable score on the mathematics placement test. Staff/Offered every spring

**MATH120 CALCULUS I/LECTURE**

Calculus is essential for majors in biology, chemistry, computer science, mathematics, physics, and environmental science and policy. Part I includes functions, limits, continuity, differentiation of algebraic and trigonometric functions, mean-value theorem and various applications. Part II includes Riemann sums and integrals, techniques and applications of integration, improper integrals, transcendental functions (logarithms, exponential functions and inverse trigonometric functions). Part III includes further topics from calculus proper (sequences, series, polar coordinates) and introduces linear algebra (vectors, matrices and linear systems). Though not all results are derived rigorously, care is taken to distinguish intuitive arguments from rigorous proofs. MATH120, 121 and 122 fulfill the formal-analysis requirement. MATH122 is a prerequisite for MATH131 for students who have taken MATH120, 121. Prerequisite for MATH120: appropriate score on the mathematics placement test or appropriate grade in MATH119. Mr. Joyce, Mr. Rudolph, Staff/Offered every fall (120, 122) and spring (121)

**MATH121 CALCULUS II/LECTURE**

See Mathematics 120.

**MATH122 CALCULUS III/LECTURE**

See Mathematics 120.

**MATH124 HONORS CALCULUS I/LECTURE**

Two-course sequence for strong students with interest in mathematics, computer science, physics, and other natural sciences. Physics majors usually take MATH124 simultaneously with PHYS120 and MATH125 simultaneously with PHYS121. Previous experience with calculus is recommended but not required. The honors calculus sequence covers much the same topics from calculus as the regular sequence (MATH120, 121, 122), but takes two semesters instead of three, and emphasizes both mathematical rigor and physical intuition. MATH124 and MATH125 fulfill the formal-analysis requirement. Prerequisite: appropriate score on the mathematics placement test. Mr. Morris, Ms. Sternberg/Offered every fall (124) and spring (125)

**MATH125 HONORS CALCULUS II/LECTURE**

See Mathematics 124.

**MATH126 ELEMENTARY NUMBER THEORY/LECTURE**

Introduces number theory and trains students to understand mathematical reasoning and to write proofs. Includes the unique factorization of integers as products of primes, the Euclidean algorithm, Diophantine equations, congruences, Fermat's theorem and Euler's theorem (and some applications: calendar problems, magic squares, cryptology). Prerequisite: MATH114, or one semester of calculus (MATH120 or 124), or permission. Mr. Joyce, Mr. Morris/Offered periodically

**MATH128 MODERN GEOMETRY/LECTURE**

Recalls Euclidean geometry and then proceeds to modern related topics: Hilbert's axioms; hyperbolic (Lobachevskian), elliptic and projective geometries, and philosophical implications of geometries without the Parallel Postulate; finite geometries; automorphism groups (Klein's Erlanger Programme). One aim is to show the beauty of deduction in mathematics. Prerequisites: high-school geometry and either a semester of college mathematics or permission. Mr. Joyce, Mr. Rudolph/Offered periodically

**MATH130 LINEAR ALGEBRA/LECTURE**

A requirement for mathematics and physics majors; highly recommended for all computer-science majors. Topics include systems of linear equations and their solutions, matrices and matrix algebra, inverse matrices; determinants and permutations; real  $n$ -dimensional vector spaces, abstract vector spaces and their axioms, linear transformations; inner products (dot products), orthogonality, cross products, and their geometric applications; subspaces, linear independence, bases for vector spaces, dimension, matrix rank; eigenvectors, eigenvalues, matrix diagonalization. Some applications of linear algebra will be discussed, such as computer graphics, Kirchoff's laws, linear regression (least squares), Fourier series, or differential equations. Prerequisite: MATH121 or 125. Mr. Joyce, Mr. Rudolph, Ms. Sternberg/Offered every fall

**MATH131 MULTIVARIATE CALCULUS/LECTURE**

A continuation of calculus (MATH120, 121, 122 or MATH124, 125). Multivariate calculus uses linear algebra to extend the important concepts of single-variable calculus to higher-dimensional settings. Topics include scalar-valued and vector-valued functions, graphs, level sets,



limits and continuity; partial derivatives, gradients, tangent planes, differentiability, total derivatives, directional derivatives; paths, velocity, acceleration, arclength, curvature, vector fields, divergence, curl; extrema, Hessians; multiple integrals, change of variables, Jacobians; line integrals, Green's theorem; surface integrals, Stokes' theorem, and Gauss's theorem. Prerequisites: MATH122 or MATH130. Mr. Chou, Mr. Joyce, Ms. Sternberg/Offered every spring

#### **MATH172 INTRODUCTION TO MODERN ANALYSIS/ LECTURE**

Modern analysis provides a language and unifying framework for theories encountered throughout mathematics. In this course, students learn to understand, formulate and prove mathematical statements. Ideas first encountered in calculus—convergence, completeness and integration—are studied in depth. Other topics include metric spaces, normed spaces, compactness and measure theory (Lebesgue integration). Required for mathematics majors by the junior year, and earlier if possible. Prerequisite: MATH122 or MATH125. Mr. Chou, Ms. Sternberg/Offered every year

#### **MATH201 PROSEMINAR IN MATHEMATICS/SEMINAR**

Senior undergraduates study and speak on topics in mathematics to become acquainted with diverse subjects, learn to research known topics and get practice in presenting mathematics to peers. Faculty present their research areas. Possible topics include: category theory, knot theory, automorphic forms, topos theory, low-dimensional topology, class field theory, group representation theory and dynamical systems. This is a capstone course in mathematics. Staff/Offered periodically

#### **MATH212 NUMERICAL ANALYSIS/LECTURE, LABORATORY**

Introduces concepts and techniques of scientific computing to students in mathematics, computer science and the sciences. Teaches how to set up reasonable computational algorithms and use the algorithms to work on actual projects. Topics include approximation theory, error analysis, numerical differentiation and integration, and solution of ordinary differential equations and linear systems. Prerequisites: MATH130 and MATH172. Mr. Chou, Ms. Sternberg/Offered every other year

#### **MATH214 MODERN ANALYSIS/LECTURE**

Ideas introduced in MATH172 are developed and applied to scientific models. Topics include Hilbert spaces,  $L_p$  spaces, Fourier series, Weierstrass approximation theorems and linear operators. Prerequisites: MATH130 and MATH172. Mr. Chou, Ms. Sternberg/Offered every other year

#### **MATH216 FUNCTIONS OF A COMPLEX VARIABLE/ LECTURE**

Designed for undergraduate science and mathematics majors. Includes Cauchy's theorem, power series, Laurent series, the residue theorem, harmonic functions and physical applications, such as problems in two-dimensional flow. An introduction to Riemann surfaces if time permits. Prerequisite: MATH131 and MATH172. Mr. Rudolph/Offered periodically

#### **MATH217 PROBABILITY AND STATISTICS/LECTURE**

An introduction to probability theory and mathematical statistics that emphasizes the probabilistic foundations required to understand probability models and statistical methods. Topics covered will include the probability axioms, basic combinatorics, random variables and their probability distributions, mathematical expectation and common families of probability distributions. Prerequisite: MATH121 or 125. Mr. Joyce, Staff /Offered every year

#### **MATH218 TOPICS IN STATISTICS/LECTURE**

The emphasis of this course is to develop the fundamental statistical concepts of inference and hypothesis testing from a classical perspective using the tools of probability theory. Topics investigated include sampling and sample distributions, graphical data analysis, point and interval estimation, hypothesis testing and an introduction to Bayesian inference. Prerequisite: MATH217 or ECON260. Staff/Offered periodically

#### **MATH219 LINEAR MODELS/LECTURE**

A course in linear regression analysis which explores statistical methods for modeling a linear functional relationship between a response variable and one or more predictor variables. First the underlying theory for simple regression models involving one response and one predictor variable is developed, and then the results are extended to the case of one response variable and multiple predictor variables (multiple regression). Underlying model assumptions are explored and the implications of their violation. Besides the development of the statistical theory, we will emphasize the practical application of the theory to real world examples. The prerequisite for this course is MATH217.

#### **MATH225 MODERN ALGEBRA I/LECTURE**

In the 19th century, Kummer introduced "ideal numbers" to salvage unique factorization of integers into primes (which breaks down in some rings of algebraic integers). This course discusses unique factorization and the modern theory of rings and their ideals, emphasizing Euclidean domains. Other algebraic structures (groups, fields) also are introduced. Required for all mathematics majors. Prerequisite: MATH130. Mr. Morris, Mr. Joyce/Offered every year

#### **MATH226 MODERN ALGEBRA II/LECTURE**

In the early 1800s, Abel showed that a general equation of degree at least five cannot be solved by extracting roots. Today, group theory, developed by Galois to determine which equations are solvable, is used throughout mathematics and in much of physics and chemistry. This course focuses on groups and Galois theory. Other possible topics include canonical forms of matrices and modules. Prerequisite: MATH225. Mr. Joyce, Mr. Morris/Offered every other year

#### **MATH228 TOPOLOGY/LECTURE**

This course continues the study (begun in MATH131 and MATH172) of the topological properties of subsets of Euclidean space, developing algebraic tools like homology (the proper context for Stokes' theorem from MATH131) and fundamental groups, with an emphasis on finite simplicial complexes. Further topics may include knot theory and topological modeling in psychology. Prerequisites: MATH131 and MATH172, or permission. Mr. Rudolph/Offered every other year

#### **MATH244 DIFFERENTIAL EQUATIONS/LECTURE**

Most ordinary differential equations occurring in mathematical models of physical, chemical and biological phenomena cannot be solved analytically. Numerical integrations do not lead to a desired result without qualitative analysis of the behavior of the equation's solutions. This course studies the flows of scalar and planar ordinary differential equations. Stability and bifurcation are discussed. Prerequisite: MATH130 and MATH172. Ms. Sternberg/Offered every other year

## PHILOSOPHY

### Program Faculty

Judith DeCew, Ph.D. - *Chair (on sabbatical, 08-09)*

Scott Hendricks, Ph.D. - *Acting Chair*

Patrick Derr, Ph.D.

Gary Overvold, Ph.D.

Walter Wright, Ph.D.

### Part-Time Faculty

Barbara Carlson, M.A.

Peter Marton, Ph.D.

Charles Donahue, M.A.

### Affiliate Faculty

Bernard Kaplan, Ph.D.

### Visiting Faculty

C. Wesley DeMarco, Ph.D.

Catherine McKeen, Ph.D.

### Program Overview

The Philosophy Department offers an undergraduate major in philosophy, a concentration in ethics and public policy, two minors in philosophy and a variety of elective courses, which nonmajors may take to broaden their education and fulfill Program of Liberal Studies requirements. The department also offers core or elective courses for concentrations in law and society, peace studies, ethics and public policy, and environmental science and policy.

### Undergraduate Requirements

The requirements for a major in philosophy are designed to ensure exposure to the major systematic fields in philosophy, to ensure familiarity with advanced analytic and logical methods, acquaint the student with the history of the discipline, and provide close faculty-student contacts through advanced seminars and individual research projects. The major program accommodates general liberal-arts students and those pursuing double majors and honors work, as well as those considering graduate study in philosophy. Students, especially those considering graduate school, who wish a more intensive course of study toward the major should consult with department faculty and study the Philosophy Major Handbook in the department office.

### Major requirements

#### 1. Required courses in philosophy

- Two courses in the history of philosophy (PHIL141, 142, 143, or 145)
- One course in formal logic (PHIL110). (The department recommends that students do not take logic as their first and introductory course in the major.)
- One advanced course in the area of metaphysics (PHIL234 or 263)
- One advanced course in the area of epistemology (PHIL239, 240 or 241)
- One advanced course in the area of ethics and social philosophy (PHIL220, 221 or 228)
- One advanced elective (200 or above), chosen to complement the student's second major or intended professional field
- A designated capstone seminar

#### 2. Required courses outside philosophy

Either: (i) a completed double major; or (ii) a completed concentration (for example, environmental science and policy, ethics and public policy, women's studies, classics, ancient civilizations, Jewish studies, or communications); or (iii) a completed minor in any other program or department.

### Honors Program

Students majoring in philosophy may choose to complete a Senior Thesis under the direction of a department faculty member. Successful completion of the thesis is a requirement for the award of Honors, High Honors, or Highest Honors on the student's diploma.

In order to enroll in the honors program, students are expected to meet the following requirements. They must contact a department faculty member who agrees to supervise their work. Having acquired a thesis advisor, they should submit a thesis proposal and have that proposal approved by the philosophy department no later than second semester of their junior year. Proposals should be submitted to the department chair. Finally, students must have maintained a minimum grade point average of 3.0 overall and 3.3 in their philosophy coursework.

Once enrolled in the honors program, students must

- (1) continue to maintain 3.0 overall and 3.3 in philosophy coursework,
- (2) assemble an advisory committee; the advisory committee must include the thesis advisor and at least two other members of the philosophy faculty,
- (3) satisfy major requirements,
- (4) complete senior thesis requirement. Completion includes (a) enrollment in Phil 295: Senior Thesis and (b) approval of the finished thesis and a successful oral defense of the thesis conducted by the advisory committee.

At the completion of these conditions, the department will recommend to the University that the student be awarded Departmental Honors at one of the following three levels: honors, high honors or highest honors.

### Capstone Seminars

The philosophy major culminates in the Capstone Seminar. Each semester the department will designate one of its seminar offerings as the Capstone. These will provide an in depth engagement with a central topic, figure, or movement in philosophy, and will involve serious opportunities for independent study by participating students. Capstone courses will also be open to non-capstone students. At the end of the second semester of the prior year, all majors will be informed which two seminars, one designated for each term, will be Capstone seminars for the coming school year. Majors must take the Capstone during their senior year; students taking it for Capstone credit should register for the 'Capstone' section of the seminar.

### Department Prizes and Awards, and Student and Honor Societies

Each year, the department inducts its best junior and senior philosophy majors into Phi Sigma Tau, the national philosophy honor society. At the spring honors convocation, the department awards one or more prizes to exemplary graduating seniors and the David Saltman Prize for excellence in philosophy. At the Fall convocation, the department confers a prize for the best work in logic by a first- or second-year student.



The Philosophy Club, a student organization, sponsors lectures, colloquia and informal educational and social activities for all interested Clark students.

## Philosophy Minor

Students pursuing a minor in philosophy at Clark can choose one of two tracks. Each track requires six courses in philosophy and is designed to develop students' intellectual skills and to familiarize them with the fundamental methods of philosophical inquiry. Each track begins with a foundation in logic and practical ethics.

The Great Issues-minor track emphasizes a grounding in the history of philosophy. This track engages the student in the fundamental philosophical questions with which human beings have been perennially concerned: for example, Does God exist? How ought I to live? What is knowledge? Do human beings have free will? Can political authority be legitimated? Is there life after death?

The Enriched-minor track emphasizes advanced work in courses related to students' majors. This track engages students in the fundamental philosophical questions, which their own major fields raise but do not answer: for example, What is a mind? What is a person? What is the nature of a profession? What is science? What is justice?

### Requirements for the Great Issues-Minor Track

- One course in logic (PHIL103, 107 or 110)
- One course in practical ethics (PHIL105, 130, 131, 132, 133 or 139)
- Three courses in the history of philosophy (PHIL141, 142, 143, 145, 148, 154 or 215)
- One advanced elective course (PHIL150+)

### Requirement for the Optional Enriched-Minor Track

- One course in logic (PHIL103, 107 or 110)
- One course in practical ethics (PHIL105, 130, 131, 132, 133 or 139)
- One course in the history of philosophy (PHIL141, 142, 143, 145, 148, 154 or 215)
- One elective course, chosen at any level
- Two advanced courses (PHIL150+) chosen to complement the student's major or pre- professional program.

### Directed Readings, Individual Research, Tutorials

For significant independent research, the department offers individual Directed Research (PHIL299.2) and Directed Readings (PHIL299.1) courses, and Advanced Topics in Philosophy courses (PHIL299.7). Students interested in these possibilities should consult with individual members of the philosophy faculty.

### Internships, Research Apprenticeships

Students are encouraged to apply for a research apprenticeship with an individual philosophy professor. Research apprentices work closely with their mentor on the mentor's scholarly research, sometimes co-authoring a published article. Some recent topics have been: environmental ethics; privacy in law and ethics; and statistical stylometry and ancient philosophy. Philosophy faculty also sponsor off-campus undergraduate internship experiences. Students interested in these opportunities may inquire at the department or through the internship office.

## Senior Thesis

Undergraduate majors are encouraged to complete a senior thesis (PHIL295); majors intending graduate study especially should consider this. Thesis students engage in advanced individual research on a selected philosophical problem, guided by a faculty adviser and a thesis committee composed of three faculty members. See PHIL295 for more information.

## Professional Organizations

The department has the Massachusetts Alpha Chapter of the national philosophy honor society, Phi Sigma Tau. In addition to awarding membership to academically exceptional majors, the society also sponsors speakers and colloquia, as well as trips to regional philosophy conferences.

The department is a founding member of the Boston-area Colloquium in Ancient Philosophy. The organization sponsors lectures and seminars at the various member college campuses.

## Departmental Publications

The international philosophical journal, *Idealistic Studies*, is edited by Gary Overvold. Founded by Robert N. Beck, *Idealistic Studies* is a leading interdisciplinary journal focusing on issues of contemporary European philosophy and idealism. The journal provides a forum for writing that recognizes whether by advocacy or criticism, the defining significance of consciousness and mind in the concerns of philosophy and other expressions of high culture.

## Courses

### PHIL025 EROS AND THANATOS CONCEPTIONS/FIRST-YEAR SEMINAR

Eros and Thanatos are essential human preoccupations across a wide range of cultures. We encounter eros, or love, in all experiences of intensity, creation, and connection. Thanatos, or death, occurs as loss and decay, but also as the natural cycle of endings and beginnings. PHIL025 is connected to ARTS025. Meeting sometimes separately and sometimes together, work with a common set of issues and readings. They will examine conceptions of love and death from around the world, tracing the implications of "eros" and "thanatos" for our relations with the natural world. These courses include experiential exercises, writing, and making. Fulfills the Global Perspective requirement. Mr. Wright/Offered periodically

### PHIL050 RELATIVISM & ABSOLUTISM ACROSS THE DISCIPLINES/FIRST-YEAR SEMINAR

We explore rival claims of relativists and absolutists in ethics, religion, math and the sciences, and consider some varieties of pluralism as option to these claims. Ours is a case-study approach. We study and evaluate the 'Asian values argument' against the universality of human rights, a feminist criticism of empirical science, and consider the exclusivism of contemporary religious fundamentalism. We begin with experiments in color perception and some simplified examples of alternate mathematics, and then study claims of cognitive differences across cultures. These case studies prepare us for an engagement with texts from Wittgenstein, Quine, Davidson, Nietzsche, Hegel, Habermas and Tillich that help us to think about a family of issues concerning meaning, interpretation, and truth that span disciplinary divides. Fulfills the verbal expression requirement. Mr. DeMarco/Offered periodically

**PHIL075 QUESTIONING GENDER**

Gender is a pervasive feature of our social life. We acquire a gender at birth, and this gender is typically assumed to stay with us throughout our lives. Gender organizes much—perhaps all—of our experience. Furthermore, gender is often assumed to be a natural and immutable fact of human life. But what is gender, really? Is it necessary to have only two genders? Are more genders possible? In this seminar we will explore challenges to gender. We will read and discuss historical and contemporary texts which have questioned gender in various ways. Some of these texts question the naturalness of gendered traits; some question the fairness of gendered upbringing; and some question the reality of gender itself. Along the way, students will work on developing their competence in analyzing texts and arguments. Fulfills the Values Perspective requirement. Ms. McKeen/Offered Periodically

**PHIL100 THE GOOD LIFE/FIRST-YEAR SEMINAR**

Healthy human beings want to live good lives. We want to be happy. But what can a person do to live “a good life?” What makes one life “good” and another “not good”? What makes one person “happy” and another not? Are there significant connections between health, well-being, social involvement, ethical endeavor, worldly achievement, felt satisfaction, and living a “good” life? In this seminar we will use philosophical, psychological, religious, and literary works to explore some of the ways that human beings organize their lives, set fundamental goals and values, and try to assess these. Our seminar will examine a range of possible life aims including the search for pleasure, cultivating personal excellence, the pursuit of wealth and power, contributing to the public good, ecological attunement, seeking spiritual fulfillment, and having no “aim” at all. Mr. DeMarco/Offered periodically

**PHIL102 INTRODUCTION TO PHILOSOPHY/LECTURE, DISCUSSION**

Introductory study of typical problems drawn from philosophy's main branches. Topics may include God's existence, the nature of morality, skepticism, the nature of the mind, freedom vs. determinism, immortality and political theory. Readings are taken from both classic and contemporary sources. Mr. Hendricks/Offered every year

**PHIL103 ANALYTIC REASONING/LECTURE, DISCUSSION**

This is a hands-on course, designed to help students improve a very important set of life skills, collectively referred to as “critical thinking.” While this is considered an informal logic course (because it analyzes reasoning within the natural language context), it goes beyond the principles of basic logic, encouraging students to ask thoughtful questions in their ongoing process of establishing a set of beliefs that can serve as a reliable roadmap of experience. Fulfills Formal Analysis requirement. Ms. Carlson/Offered every year

**PHIL104 THE AIDS PANDEMIC/FIRST-YEAR SEMINAR**

The global AIDS pandemic presents a public health challenge of unprecedented dimensions — a challenge which will test not only our scientific and medical establishments, but our commitment to social justice, professional fidelity, interpersonal solidarity and, especially, to the care of the world's poorest and most disadvantaged populations. This seminar will draw on the rich philosophical, biological, epidemiological, legal, medical, and sociological literatures in order to examine a number of the moral and public policy issues which have been raised by the AIDS pandemic. Particular attention is given to the issues raised by the pandemic in developing countries. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Mr. Derr/Offered every other year

**PHIL105 PERSONAL VALUES/LECTURE, DISCUSSION**

A philosophical study of some fundamental human value concerns. Students learn some important moral theories and methods used to reason philosophically about moral questions. Fulfills Values Perspective requirement. Ms. DeCew, Mr. DeMarco, Visiting Staff/Offered every semester

**PHIL106 SCIENCE, RELIGION AND REALITY/FIRST-YEAR SEMINAR**

This Seminar will address some basic issues in the Philosophy of Science and the Philosophy of Religion: What is science? What is reality? How do science and religion differ with regard to the relative roles played by faith and evidence in establishing knowledge claims about reality? Does science provide better explanations than theology or literature? How do religious arguments for the existence of God differ from scientific arguments for the existence of dark matter? Special attention will be given to developing students' abilities to read complex texts, write logically, think analytically, and argue cogently. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Mr. Derr/Offered every other year

**PHIL107 LOGIC AND LEGAL ANALYSIS/LECTURE, DISCUSSION**

This course introduces students to the rigors of modern symbolic logic as a tool for understanding and evaluating legal arguments of various types and for generally improving analytical skills. Attention will be directed to the unique features of legal reasoning. Sample LSAT problems, along with traditional logic problem-solving exercises and occasional creative oral class presentations, will be assigned. Ms. Carlson/Offered every year

**PHIL108 PRIVACY PROTECTION IN LAW & ETHICS/FIRST-YEAR SEMINAR**

In this class we will first survey the history of privacy protection as it has evolved in American tort law and constitutional law. We will then analyze alternative philosophical characterizations of privacy and its scope, focusing on information, autonomy, property, and intimacy. We will assess varied reasons for valuing privacy and then consider contrasting versions of the feminist critique of privacy as a tool for shielding abuse. Throughout the course we will study landmark legal cases invoking privacy from the early 1900's to the present, with an eye toward understanding the scope and limits of privacy protection. We will consider numerous applications of privacy to moral and legal issues including the legislation of morals, drug testing, information technologies, and the balance between privacy and public safety. Fulfills Values Perspective requirement. Ms. DeCew/Offered periodically

**PHIL110 INTRODUCTION TO LOGIC/LECTURE, DISCUSSION**

An introduction to formal logic with attention to proofs within the system of first-order logic and translations from sentences in this formal language into sentences in ordinary English. (The department recommends that students not take this course as an introduction to the major. The course material is mathematical in nature and is not representative of the topics and reading material typically found in other philosophy courses.) Fulfills the Formal Analysis requirement. Mr. Hendricks/Offered every year

**PHIL111 MINDS, PERSONS, AND ROBOTS/FIRST-YEAR SEMINAR**

Examination of the place of human beings in the world. We discuss various visions of human beings - philosophical, scientific and religious. Readings include accounts of the Nazi holocaust, current literature in psychology, and both fiction and film exploring the idea that people are essentially machines. Mr. Hendricks/Offered periodically



**PHIL112 THE PHILOSOPHY OF THOMAS AQUINAS/FIRST-YEAR SEMINAR**

This seminar studies the worldview of Thomas Aquinas. Aquinas' system was the great medieval harmony of Greek philosophy, Roman judicial thought, the best science of the day, and Western and Eastern theology. It is still regarded as an admirable response to the problem of faith and reason. Moreover, Aquinas' 'disputational method' remains a model of dispassionate speculative inquiry. We look at Aquinas' Five Ways (arguments for the existence of God); his discussion of the attributes of God; his philosophical anthropology (that is, his account of human nature); and his views on ethics and natural law. Writing assignments will involve stating and defending a thesis using clear, orderly, and logical reasoning. Students will be asked to model their assignments on Aquinas' writing. This seminar is an excellent introduction to philosophy and intellectual history. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to choose this seminar. Staff/Offered periodically

**PHIL130 MEDICAL ETHICS/LECTURE, DISCUSSION**

Investigates contemporary issues in medical ethics: informed consent, definitions of death, treatment termination and euthanasia, abortion, confidentiality and truth telling, genetic screening and counseling, research on human subjects, resource allocation, reproductive technologies, conflicts of interest and national health policy. Not open to first-year students. Fulfills Values Perspective requirement. Mr. Derr/Offered every year

**PHIL131 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION**

What principles should guide human interaction with the environment? This course considers a range of moral perspectives, including anthropocentrism, animal-rights theory, biocentrism, social ecology, ecocentrism, deep ecology, ecofeminism and the land ethic. It also considers a range of environmental issues, such as global warming, species preservation, population policy, pollution, nuclear power, animal experimentation and sustainable development. Fulfills Values Perspective requirement. Mr. Derr/Offered every year

**PHIL132 SOCIAL AND POLITICAL ETHICS/LECTURE, DISCUSSION**

Topics in social and political theory, such as equality, liberty and justifications for political authority, as well as issues such as: What is affirmative action and can it be morally justified? Should governments censor pornography? Is capital punishment acceptable? Can war be justified? Should morality be legislated? Fulfills Values Perspective requirement. Ms. DeCew, Ms. McKeen/Offered every year

**PHIL135 EXISTENTIALISM IN PHILOSOPHY, LITERATURE AND THE HUMAN SCIENCES/LECTURE, DISCUSSION**

Explores central existential themes—such as the meaning of life, freedom and responsibility; the role of the irrational in human thought, action and expression; and the death of God in their historical, cultural and thematic context. Existentialism is treated both as a postwar cultural event and as a view of life's meaning and possibilities. Fulfills Values Perspective requirement. Mr. Overvold, Mr. DeMarco/Offered every year

**PHIL139 MORAL PROBLEMS IN THE PROFESSIONS/LECTURE, DISCUSSION**

This course examines moral issues and dilemmas typically found in the professions, that is, in law, medicine, advertising, therapy, business, education, etc. Among the issues considered are privacy and confidentiality, truthfulness and deception, individual responsibility, social justice, professionalism, and generally, the dilemmas created by conflicts between professional or role morality and personal or ordinary morality. Fulfills Values Perspective requirement. Staff/Offered periodically

**PHIL141 HISTORY OF ANCIENT GREEK PHILOSOPHY/LECTURE, DISCUSSION**

Examines the origins of Western thought in early Greek philosophy. Readings include the fragments of the pre-Socratic philosophers: the Apology, Phaedo, Gorgias and Republic of Plato; and selections from Aristotle. Fulfills Historical Perspective requirement. Ms. McKeen, Mr. Hendricks/Offered every year

**PHIL142 HISTORY OF MEDIEVAL PHILOSOPHY/LECTURE, DISCUSSION**

Surveys Christian, Jewish and Islamic medieval philosophy with special attention to some of the philosophical texts that were pivotal to the later development of Western philosophy and culture. These include Augustine's Confessions, Boethius' Consolation of Philosophy and Aquinas' Summa Contra Gentiles. Fulfills Historical Perspective requirement. Staff/Offered periodically

**PHIL143 HISTORY OF MODERN EUROPEAN PHILOSOPHY/LECTURE, DISCUSSION**

Surveys the principal movements of European philosophy in the 17th and 18th centuries. Readings include works from among the following authors: Descartes, Spinoza, Locke, Berkeley, Leibniz, Hume, and Kant. Fulfills Historical Perspective requirement. Mr. DeMarco/Offered every year

**PHIL145 HISTORY OF CONTEMPORARY PHILOSOPHY/LECTURE, DISCUSSION**

Surveys major trends in recent Anglo-American and Continental philosophy: pragmatism, logical positivism, ordinary language philosophy, hermeneutics and phenomenology. Each alternative is considered as a coherent perspective on experience, with special attention given to its style and methodology. Prerequisite: PHIL143 or permission of the instructor. Fulfills Historical Perspective requirement. Mr. Overvold/Offered every year

**PHIL148 HISTORY OF AMERICAN PHILOSOPHY/LECTURE, DISCUSSION**

Concentrates on the founders of the first indigenous American philosophical movement, pragmatism—Peirce, James and Dewey—and explores their influence on later pragmatists—Lewis, Quine and Rorty. Prerequisite: one course in philosophy. Staff/Offered periodically

**PHIL150 PHILOSOPHY OF RELIGION/LECTURE, DISCUSSION**

Studies religion as a form of world view and a perennial dimension of human experience. Prerequisite: one course in philosophy. Fulfills Values Perspective requirement. Mr. Wright/Offered periodically

**PHIL160 INTERMEDIATE LOGIC/LECTURE, DISCUSSION**

An examination of one of the following: extensions of first-order logic (modal logic, deontic logic, tense logic); metalogic; axiomatics; philosophical problems that arise in connection with formal logic. Mr. Hendricks/Offered periodically

**PHIL166 PHILOSOPHY OF LOVE/LECTURE, DISCUSSION**

Varieties of love, their transformations and transformative effects. Erotic love (what enhances it, what perverts it), familial love and friendship. Love as feeling, love as attention, love as will, love as act, love as being. Love as illusion, as sublimation, as biochemical process; love as the spice of life and as the essence of the psyche. Love as union, as bonding, as partnering, and as mutual development of differences. Love as a gift and love as an art. Love in relation to desire, knowledge, power and ecstasy. Love of truth, love of beauty, love of justice. Love of self, love of community, love of nature, love of God. Selections from Plato, Ovid, Dante, Shakespeare, Marx, Freud, Goldman, Sartre, Tillich, Nagel, Wilson, Berry, Bernard, Rumi, and stories of the Baal Shem Tov. Mr. DeMarco/Offered periodically

**PHIL169 AESTHETICS/LECTURE, DISCUSSION**

Explores questions concerning the value and nature of the arts, including the visual arts, music, performance, and literature. Course topics may include: Can art in general be neatly defined? Fine art? Particular arts? What distinguishes “good” art from “bad” art? Are there objective standards for aesthetic judgment? What is the point of artwork? What is creativity? Are appreciation and criticism creative acts? Are there ‘aesthetic experiences’ special to the arts? What is the role of taste and sensibility? What is the relationship between the artist and the work of art? Between artworks and audiences? Between art and history? Between art and nature? Staff/Offered periodically

**PHIL171 PHILOSOPHY OF EDUCATION/LECTURE, DISCUSSION**

An examination of our educational institutions, the value of education and various theories of education. Focus on such questions as: What kinds of educational institutions are possible? Which ones are best? What does it mean to be educated? What is the value of being educated? We will approach these questions through the works of Marx, Plato, Rousseau and others. In addition, we consider the application of research in psychology and social psychology. Mr. Hendricks/Offered periodically

**PHIL201 SURSEMINAR: RESEARCH AND WRITING IN PHILOSOPHY/SEMINAR**

Prerequisite: permission. Staff/Variable credit

**PHIL202 SURSEMINAR: PHILOSOPHICAL JOURNALS/SEMINAR**

Prerequisite: permission. Staff/Variable credit

**PHIL203 SURSEMINAR: TEACHING PHILOSOPHY/SEMINAR**

Registration is limited to students working as discussion group leaders in PHIL102, 105, 110, 130, 131 or 132. Mr. Derr, Ms. DeCew, Mr. Hendricks, Mr. Wright/Offered every semester

**PHIL210 MODERNISM IN PHILOSOPHY, LITERATURE AND THE ARTS/LECTURE, DISCUSSION**

Between 1890 and 1930, the forms of inquiry and artistic expression in Western culture went through radical, foundational transformation. Using representative texts from the humanities and the arts, this course examines the Modernist transformation in its historical, cultural and thematic context, using a multidisciplinary perspective to integrate topics in related areas of inquiry and expression. Prerequisite: two courses in philosophy plus courses in related areas. Fulfills the Historical Perspective. Mr. Overvold/Offered periodically

**PHIL211 COGNITIVE SCIENCE/LECTURE, DISCUSSION**

An advanced philosophical discussion of the current research in cognitive psychology, artificial intelligence, neuroscience and philosophy. We investigate the central features and underlying philosophical assumptions of the science of the mind, including various forms of computationalism, as well as different types of experimental procedures. Mr. Hendricks/Offered periodically

**PHIL212 PHILOSOPHY AND THE HUMAN SCIENCES/LECTURE, DISCUSSION**

Using texts from both the humanities and the social sciences, the course examines central philosophical themes in the human sciences—rationality; action, choice and character; human nature; the other; self and society; explanation and human action—in their historical, cultural and thematic context, integrating topics in related areas of inquiry and expression. Prerequisite: two courses in philosophy plus courses in related areas. Staff/Offered periodically

**PHIL213 THE IDEAL OF THE EDUCATED PERSON/LECTURE, DISCUSSION**

This course explores the suggestion that in ideal circumstances, there is a close relationship between being educated and living a happy or “good” life. Beginning by looking back to Socrates and Plato for inspiration, we explore questions concerning the impact of knowledge on ethical behavior and moral character, as well as the impact of morality on happiness. Topics include: (1) the nature of knowledge, understanding, and wisdom—and the way in which formal education contributes to these states, (2) the nature of virtue and moral value, and (3) what it means to live a “good” life, or to flourish, in our culture. Fulfills Values Perspective requirement. Mr. Hendricks/Offered every year

**PHIL214 POSTMODERNISM AND RECENT CONTINENTAL PHILOSOPHY/LECTURE, DISCUSSION**

Introduces five contemporary European philosophical movements: hermeneutics, deconstructionism, critical theory, structuralism and poststructuralism. Prerequisite: two courses in philosophy or permission of instructor. Fulfills Historical Perspective requirement. Mr. Overvold/Offered periodically

**PHIL215 KANT AND THE 19TH CENTURY/LECTURE, DISCUSSION**

Examines the work of Kant and selected later philosophers (Fichte, Hegel, Schopenhauer, Nietzsche, Marx, Engels and Comte) with emphasis on their influence on contemporary thought. Prerequisite: two courses in philosophy, including PHIL143. Staff/Offered periodically

**PHIL220 THEORIES OF ETHICS/LECTURE, DISCUSSION**

Examines the principal ethical theories from the history of Western philosophy, including such philosophers as Plato, Aristotle, Epicurus, Aquinas, Hobbes, Hume, Kant, Mill, Ross and Rawls. Topics include: What is “the Good”? Are there fundamental standards of right conduct? Are moral judgments objective? Why should we be moral? Prerequisite: two courses in philosophy. Fulfills Values Perspective requirement. Ms. DeCew, Ms. McKeen/Offered every year

**PHIL221 SOCIAL AND POLITICAL PHILOSOPHY/LECTURE, DISCUSSION**

Surveys the leading philosophical accounts of social and political institutions. Property, civil and natural rights, freedom and obligations and the legitimation of political authority are treated in detail. Readings include both classical and contemporary sources. Prerequisite: two courses in philosophy. Fulfills Values Perspective requirement. Ms. DeCew, Ms. McKeen/Offered every other year

**PHIL228 CONTEMPORARY MORAL THEORY/LECTURE, DISCUSSION**

Surveys recent work in moral theory (including both metaethical and normative issues) by leading Anglo-American philosophers. Prerequisite: two courses in philosophy. Fulfills Values Perspective requirement. Ms. DeCew/Offered periodically

**PHIL232 CASE STUDIES IN ENVIRONMENTAL ETHICS/SEMINAR**

An intensive examination of a small set of issues or cases chosen by course members. Recent topics include old growth forest, ecotourism, animal experimentation, invasive species and water-use restrictions. Prerequisite: Environmental Ethics. Mr. Derr/Offered every other year

**PHIL234 METAPHYSICS/LECTURE, DISCUSSION**

An advanced study of fundamental problems in metaphysics, including one or more of the following: properties, universals, substance, the mind/body relation, category theory, identity and individuation, free will, and the nature of space and time. Prerequisite: two courses in philosophy. Staff/Offered every other year



**PHIL239 THEORIES OF KNOWLEDGE/LECTURE, DISCUSSION**

An historical and 'systems' approach to epistemology examining four paradigms: Platonic-Idealistic, Empiricist, Kant's Critical Idealism, and Linguistic Analysis, and also the PostModern thesis that all such are outdated exercises founded on fundamental confusions concerning what philosophy can do. In all cases, attention given to the nature, concept and sources of knowledge, with special attention to the inter-relationships among belief, knowledge, evidence, proof, truth, and the problems of relativism, skepticism and foundationalism. Prerequisite: two courses in philosophy. Mr. Overvold/Offered every other year

**PHIL240 EPISTEMOLOGY/LECTURE, DISCUSSION**

This course studies the concepts of knowledge and rationality. Topics are drawn from among the following. The problem of skepticism: can we have genuine knowledge of the existence and character of the external world? Accounts of knowledge: Is knowledge justified, true belief? Are the causal, the truth-tracking, and the contextualist accounts viable alternatives? Rationality and justification: How are our beliefs rationally supported by evidence? by experience? Is this rational support internal or external to the agent in question? Prerequisite: It is recommended that students have completed some previous coursework in philosophy. Mr. Hendricks/Offered every other year

**PHIL241 PHILOSOPHY OF SCIENCE/LECTURE, DISCUSSION**

Examines such questions as: What is a scientific explanation? Can induction be justified? What could justify the claim that one theory is better than another? Are there such things as objective facts? Do scientific theories disclose the ultimate constituents of the universe? What is the difference between science and pseudoscience? Prerequisite: four courses in natural sciences or two courses in philosophy. Mr. Derr/Offered every other year

**PHIL242 PHILOSOPHY OF LANGUAGE/LECTURE, DISCUSSION**

A philosophical examination of language. Explores general questions such as: What is the relationship between language and the world? What is the relationship between language and thought? Focuses on the nature of reference, meaning, names, conceptual schemes and analyticity. Readings include works by Frege, Russell, Grice, and Kripke. Mr. Hendricks/Offered periodically

**PHIL243 PHILOSOPHY OF PSYCHOLOGY/LECTURE, DISCUSSION**

Focuses on the assumption that the mind is a machine that can be studied scientifically. We examine questions concerning the relationship between the mind and the brain, the ideas that the mind is a computer and that an artificial machine could think, and various proposals for how the mind is structured, including connectionism. Mr. Hendricks/Offered every year

**PHIL250 PLATO/SEMINAR**

An advanced study of the philosophical thought of Plato. The seminar involves careful reading and discussion of one of the major dialogues, such as the *Parmenides*, *Sophist* or *Theaetetus*. Prerequisite: PHIL141. Ms. McKeen/Offered every other year

**PHIL251 ARISTOTLE/SEMINAR**

An advanced study of the philosophical thought of Aristotle. The seminar involves careful reading and discussion of one of the major works, such as the *De Anima*, *Physics*, *Metaphysics* and *Nicomachean Ethics*. Prerequisite: PHIL141. Staff/Offered every other year

**PHIL256 KANT/SEMINAR**

A study of Kant's "Critique of Pure Reason," regarded by many as the most important philosophical text of the last several hundred years. Prerequisite: two courses in philosophy, including PHIL143. Staff/Offered periodically

**PHIL258 THE ORIGINS OF ANALYTIC PHILOSOPHY/SEMINAR**

Examines the development of analytic philosophy through an intensive study of its three founding figures: Gottlob Frege, Bertrand Russell and Ludwig Wittgenstein. Readings include Frege's "Foundations of Arithmetic," Russell's "Mysticism and Logic" and Wittgenstein's "Tractatus Logico-Philosophicus." Prerequisite: two courses in philosophy, including PHIL110 or PHIL160. Staff/Offered periodically

**PHIL260 KIERKEGAARD AND NIETZSCHE/SEMINAR**

Studies Kierkegaard and Nietzsche as seminal figures in 19th-century intellectual life and as sources of later 20th- and 21st-century philosophical developments. Particular attention is given to their views of human existence and of truth. Prerequisite: two courses in philosophy. Mr. Overvold/Offered periodically

**PHIL263 PHILOSOPHY OF MIND/SEMINAR**

A critical examination of the nature and concept of mind. We consider various issues from among the following: What is the relationship between the mind and the brain? What is the nature of consciousness? How do mental states represent the world? Readings include works by Smart, Putnam, Fodor, Kripke, and Jackson. Prerequisite: It is recommended that students have completed some previous coursework in philosophy. Mr. Hendricks/Offered every other year

**PHIL270 PHILOSOPHY OF LAW/SEMINAR**

Examines fundamental questions in philosophy of law, such as: What is the source and purpose of law? What is the nature of judicial reasoning, and is it subjective or governed by some set of principles? How do alternative theories of law explain rights, duties, liability, responsibility and so forth? What is the relationship between liberty, privacy and justice? Readings include selections from legal theory and a variety of contemporary court decisions. Prerequisite: two courses in philosophy. Fulfills Values Perspective requirement. Ms. DeCew/Offered every year

**PHIL272 ADVANCED ISSUES IN MEDICAL ETHICS/SEMINAR**

A rigorous investigation of two or three current controversies related to medicine, health policy and ethics. Readings include original materials from legal, medical and philosophical literature. Topics have included: surrogate motherhood, AIDS, xenogestation, stem-cell research and assisted suicide. Prerequisite: PHIL 130 Medical Ethics. Mr. Derr/Offered every other year

**PHIL273 AIDS PANDEMIC/SEMINAR**

The Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) present American society with a public health challenge of unprecedented dimensions—a challenge, which will test not only our scientific and medical establishments, but our commitment to social justice, professional fidelity, and interpersonal solidarity. This course will draw on the rich philosophical, biological, epidemiological, legal, medical, and sociological literatures in order to examine a number of the moral and public policy issues that have been raised by the HIV epidemic. Particular attention is given to the issues raised by the international nature of the pandemic. Mr. Derr/Offered every other year

**PHIL275 PHENOMENOLOGY AND HERMENEUTICS/SEMINAR**

Traces the development of two major 20th-century movements in continental philosophy. Edmund Husserl and Maurice Merleau-Ponty are focused on in Phenomenology; Hans Georg Gadamer in Hermeneutics. In both, collateral reading will present the historical context and development of each movement. Prerequisite: at least three courses in philosophy. Mr. Overvold/Offered periodically

**PHIL276 HEIDEGGER AND EARLY 20TH-CENTURY PHILOSOPHY/SEMINAR**

Concentrates on developments in 19th- and 20th-century Continental philosophy, which influenced the main text of this seminar, Heidegger's "Being and Time." Attention also will be given to the broader cultural context and to parallel changes in American and British philosophy during the early 20th century. Prerequisite: at least three courses in philosophy. Mr. Overvold/Offered periodically

**PHIL286 CRITICAL RATIONALISM/SEMINAR**

Focuses on the theories of knowledge, rationality and science advanced by such contemporary thinkers as Kuhn, Popper, Feyerabend, Laudan, Lakatos and Zahar. Prerequisite: two courses in philosophy, including PHIL241, or permission. Mr. Derr/Offered periodically

**PHIL287 PHILOSOPHY OF THE SOCIAL SCIENCES/SEMINAR**

A critical and intensive survey of the four alternative accounts of explanation, social reality and social science put forward by the neopositivist empiricists, the phenomenologists, the neo-Wittgensteinians and the Continental hermeneuticists and critical theorists. Special attention is given to theories of explanation in history and in psychology. Prerequisite: at least four courses in philosophy or graduate status in a social science. Staff/Offered periodically

**PHIL295 SENIOR THESIS/INDIVIDUAL PROJECTS**

The prerequisites, which should be completed by the end of the student's junior year, are: (1) at least six courses in philosophy; and (2) submission and approval of a thesis proposal. The thesis proposal must describe the nature and scope of the proposed project, provide a bibliography of the principal sources the student expects to use, include a schedule for submission of first and final drafts to the adviser and the committee and be signed by the student's thesis adviser. Upon completion of the thesis, the department faculty schedules an oral defense for the student. For regulations for honors, see earlier entry. Offered for one or two credits over one or two semesters. Staff

**PHIL299 SEC. 1 DIRECTED RESEARCH/INDIVIDUAL PROJECTS**

See description and prerequisites under Major Requirements.

**PHIL299 SEC. 2 DIRECTED RESEARCH/INDIVIDUAL PROJECTS**

See description and prerequisites under Major Requirements.

**PHIL299 SEC. 5 RESEARCH APPRENTICESHIP/INDIVIDUAL PROJECTS**

A research apprentice participates in the current professional research of her or his faculty sponsor. Students accepted as apprentices need initiative, perseverance and superior research and writing skills. Prerequisite: at least four courses in philosophy, permission of the instructor and approval of the department. Staff/Offered every semester

**PHIL299 SEC. 7 ADVANCED TOPICS IN PHILOSOPHY/INDIVIDUAL PROJECTS**

Individual tutorials and supervised research on philosophical topics selected by the student and faculty sponsor. Prerequisite: at least four courses in philosophy and permission of instructor. Staff/Offered every semester

**PHYSICS****Program Faculty**

Charles Agosta, Ph.D.  
S. Leslie Blatt, Ph.D.  
Harvey Gould, Ph.D.  
Arshad Kudrolli, Ph.D.  
Christopher P. Landee, Ph.D.  
Ranjan Mukhopadhyay, Ph.D.

**Adjunct Faculty**

Daeg Brenner, Ph.D.  
Robert Goble, Ph.D.  
Shuanghong Huo, Ph.D.

**Affiliate Faculty**

George Phillies, Ph.D.

**Visiting Faculty**

Louis Colonna-Romano, M.S., M.B.A.

**Emeriti Faculty**

Roy Andersen, Ph.D.  
John Davies, Ph.D.  
Christoph Hohenemser, Ph.D.  
Roger P. Kohin, Ph.D.

**Program Overview**

Physics is the most fundamental of the sciences and is an important part of a liberal-arts education. Introductory courses are designed for students in all majors and provide a background in physical principles, the observation of natural processes, the logic and nature of science, and the diverse applications of physics. The introductory courses are:

- 1. Scientific Perspective Courses.** PHYS020, 030, 140, ASTR001 and ASTR002 have no prerequisites and satisfy the scientific-perspective requirement of the Program of Liberal Studies. PHYS110 and 120 can be taken in satisfaction of either the scientific-perspective or formal-analysis requirement, but not both. PHYS111, 121, 127, 130 and 131, which also fulfill the scientific perspective, are primarily for science majors.
- 2. Introductory Sequences.** Prospective science majors are urged to begin their study of physics during their first or second years. The department offers two sequences of introductory courses. PHYS110/111 is a two-semester, noncalculus-based survey of physics appropriate for the majority of science majors, including environmental science and policy majors and premedical/predental students. PHYS120/121/130 is a three-semester sequence, recommended for physics, chemistry and mathematics majors, which covers mechanics, electricity and magnetism, waves, and optics in more depth than the 110/111 sequence. Because PHYS121 discusses the subject matter more deeply, it is less comprehensive than PHYS111, and should be followed by PHYS130.
- 3. Laboratory Courses.** PHYS110, 111, 120, 121, 127, 130, 131 and 219 offer laboratory experience. PHYS110 and 111 fulfill the physics laboratory requirement for premedical/predental students.



## Undergraduate Requirements

A major in physics can be structured to meet the interests of individual students, including graduate study in physics, related sciences, engineering, and careers in environmental studies, management, government, law, medicine and teaching. During their first year, prospective physics majors are urged to enroll in PHYS120 and 121 and to consult the undergraduate physics adviser about their program of study. Physics major requirements consist of 14 common core courses and four additional approved courses in physics or related areas. The requirements are flexible and, through consultation with the undergraduate physics adviser, may be modified to satisfy the particular needs and interests of each student. Examples of individual programs include:

**General Physics** – for students who wish to major in physics as part of liberal-arts education, including preparation for careers in teaching or business.

**Preprofessional Physics** – courses in physics, chemistry and mathematics to prepare students for graduate study in physics or research in industry.

**Biological Physics** – includes chemistry and biology courses that can be used to prepare for medical or dental schools or for careers in the biomedical professions.

**Computational Physics** – advanced courses in physics, computer science and mathematics designed to prepare students for graduate study in the rapidly growing area of computational science.

Students interested in using physics as the basis for an engineering career should inquire about the 3/2 Engineering Program offering students a five-year option that combines a B.A. from Clark and a B.S. in engineering from Columbia University.

### Courses in the core curriculum include:

1. Introductory Physics (2):  
PHYS120 and PHYS121 (or PHYS110/111)
2. Intermediate-level Physics (2):  
PHYS130 and 131
3. Calculus (4):  
MATH124, 125, 130 and 131
4. Laboratory-based courses (1):  
PHYS127 or 219
5. Upper-level courses (4):  
PHYS150, 160, 161 and 171
6. Senior project (1):  
PHYS299

Total in core curriculum: 14

Additional approved electives: 4

Total in major program: 18

Students with strong backgrounds in physics and mathematics may replace lower-level required courses with appropriate advanced courses with adviser approval. Advanced-placement credits may count toward major requirements. Advanced undergraduates may take graduate-level courses. Majors must meet with the undergraduate physics adviser prior to registration every semester to plan their course of study and to ensure that all requirements for the major are being satisfied. It is possible to complete all requirements for the major within three years, so that it is not essential to begin the study of physics in the first year.

Information about career opportunities and further information about courses and major requirements can be obtained from the undergraduate physics adviser and other physics faculty members.

## The Capstone Experience

An independent research project is the appropriate capstone experience for most physics majors. Students are encouraged to “do physics” at the earliest opportunity. Majors must take a capstone course satisfied by one semester of PHYS299 Directed Study in Physics, or an approved course of comparable scope. Near the end of the junior year (or earlier) a physics major should choose a topic for his or her senior project with department faculty. Work is conducted under the guidance of a faculty member, often with the assistance of graduate students. These projects often lead to publication in refereed physics journals. Majors with a special interest in research may continue their research by enrolling in additional semesters of PHYS299.

## Honors Program

Students can apply for departmental honors in recognition of meritorious academic achievement and creativity in research. An honors candidate must maintain a minimum overall B– average. All eligible majors are encouraged to participate. Written applications should be submitted to the undergraduate adviser by the end of the junior year. Candidates will conduct a research project under faculty member guidance during the junior and/or senior years. A thesis describing the work must be submitted no later than April 1 of the senior year and be defended orally in a special departmental convocation about two weeks later. Recommendation for honors in physics is made on the basis of the quality of the thesis and student performance in the defense. Students may gain credit for thesis research by registering for PHYS299.

## Physics Minor

The requirements for a minor in physics include six courses consisting of PHYS120/PHYS121 (or 110/111), PHYS130, PHYS131 and two additional electives approved by the undergraduate physics adviser. Students receiving credit for a scientific perspective course in physics prior to enrolling in PHYS120 may use it to replace one elective course. Requirements are flexible and the undergraduate physics adviser can replace any of the required core courses for students who are prepared for more advanced training.

## Accelerated Degree Program

Physics offers an accelerated B.A./Master's degree program to eligible students. For more information, visit [www.clarku.edu/accelerate](http://www.clarku.edu/accelerate).

## Graduate Program

The department offers the master of arts and doctor of philosophy degrees in physics. Research is concentrated in experimental and theoretical studies of condensed matter, including organic superconductivity, molecular magnetic materials, granular matter, complex materials and nonlinear physics, biological physics, supercooled liquids and nucleation, and computer simulations. Other research areas include theoretical plasma physics, polymer science, nuclear physics and biomolecules.

Further information on the research interests of the faculty and research opportunities for graduate students can be found at the department's Web site at <http://physics.clarku.edu>.

Application forms for admission and financial aid may be requested from the chair of the department. During the academic year, financial

support is available in the form of tuition remissions, teaching assistantships and research assistantships. The department considers the financial support of its graduate students an important responsibility.

## Requirements

The academic requirements are flexible with emphasis on early student participation in research and informal student evaluation. A distinctive part of each student's course work is a research apprenticeship, PHYS303, which introduces students to different research groups beginning in the first year of graduate studies.

M.A. degree students must satisfy the general University residence and course requirements, pass four of the core graduate courses (PHYS301, 302, 305, 306, 309 and 310) and one semester of PHYS303 with a grade of B- or better, and pass two oral examinations in the subject matter of the core graduate courses. In contrast to M.A. physics programs at many other universities, M.A. candidates also must complete a thesis based on original research.

Ph.D. degree students must fulfill residence and course requirements, pass the core graduate courses (PHYS301, 302, 305, 306, 309 and 310) with a grade of B or higher, and complete three semesters of PHYS303. The department does not rely on a formal written qualifying examination to evaluate student readiness for the Ph.D. Instead, students must pass four oral examinations that stress qualitative, as well as quantitative aspects of the subject matter of the core graduate courses. Students are required to pass an additional graduate course (approved by the graduate student adviser) in a subject that is outside the area of their dissertation concentration. The course may be in physics, the other sciences, mathematics, computer science or in another appropriate field. Ph.D. candidates also complete a dissertation based on original research. Students entering with advanced standing and transferable credit are encouraged to demonstrate proficiency in the core graduate courses through oral examinations.

Graduate students in both the M.A. and Ph.D. programs are required to gain supervised teaching experience either as teaching assistants or teaching fellows in the department, or elsewhere if approved by the department.

More information about the requirements for the Ph.D. and M.A. degrees in physics is available from the Graduate Student Handbook. Copies are available upon request from the graduate-student adviser.

## Courses

### ASTR001 EXPLORING THE UNIVERSE/LECTURE, OBSERVATORY

Ideas and methods of astronomy for nonscience majors. Devoted to the planets, sun, stars, their life cycles and the galaxies. Concepts from physics, chemistry, biology, and geology are discussed. Explores theories of the composition and origin of the solar system, the universe, and life. Weekly evening observation sessions - required as part of the work of the course - connect the wide-ranging lecture and textbook topics to the real world visible in the skies. Additional appropriate observations may also be assigned from time to time. Not available to students who have taken ASTR002. Fulfills the Scientific Perspective. Mr. Agosta/Offered every fall

### ASTR002 THE PLANETS AND SPACE EXPLORATION/ LECTURE, OBSERVATORY

Covers much of the same material as ASTR001, but with more emphasis on the solar system and past and future projects for its exploration. Topics include the sun, comets and asteroids, planetary and satellite surfaces, and planetary interiors and atmospheres. The principles of rocket flight and the motion of objects in the solar system are treated qualitatively and with simple algebra. Weekly evening observa-

tion sessions - required as part of the work of the course - connect the wide-ranging lecture and textbook topics to the real world visible in the skies. Additional appropriate observations may also be assigned from time to time. Not available to students who have taken ASTR001. Fulfills the Scientific Perspective. Mr. Blatt/Offered every spring

### PHYS020 DISCOVERING PHYSICS/LECTURE, LABORATORY

This course emphasizes hands-on experience and the learning of science using approaches paralleling the ways scientists gain new knowledge. Open to all undergraduates. No background in mathematics and science is assumed. Topics include wave and particle phenomena, with an emphasis on the properties of light. Two laboratories and group discussions per week. Discovering Physics uses teaching approaches that may be of interest to students with a concentration in Education. Graduate students in education who enroll in Discovering Physics must complete a science-education research project. Fulfills the Scientific Perspective. Mr. Blatt, Mr. Mukhopadhyay/Offered every year

### PHYS040 SCIENCE AND SOCIETY/FIRST-YEAR SEMINAR

We examine a few of the many important intersections of science with other areas of intellectual and cultural life. In each case, we will investigate aspects both of the science involved and of the intersecting area, learning about the applicable "ways of knowing" as well as what is known. With this shared background in hand, we will see what understandings we have gained from the confrontations and convergences between the two. No special background in science is required. Topics, selected according to the interests of the participants, may include some of the following: science and religion (for example, the controversy over teaching evolution); science and politics (energy and the environment; genetic engineering and world hunger); science and the arts (light, vision, and the reality of images on canvas); and science and social theory (relativity and cultural relativism). Students who enjoy science should enjoy this seminar; students who are ambivalent about (or downright hostile to) science should also enjoy the seminar. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to choose this seminar. Mr. Blatt/Offered in occasional fall semesters.

### PHYS110 INTRODUCTORY PHYSICS - PART I/LECTURE, DISCUSSION, LABORATORY

Introductory level course stressing both conceptual understanding and problem solving. This is a survey course for both science majors and others. Stresses the simplicity and self-consistency of physical models in explaining a variety of physical phenomena, with special attention to applications in the life sciences. Topics include Newtonian mechanics and an introduction to the thermal properties of matter. Calculus is not required, but elements of algebra and trigonometry are reviewed and utilized. PHYS110, with PHYS111, fulfills the usual entrance requirements for medical and dental schools. Three lectures and one discussion section per week, as well as one laboratory every other week. Fulfills the Scientific Perspective or Formal Analysis requirement. Mr. Landee/Offered every fall

### PHYS111 INTRODUCTORY PHYSICS - PART II/LECTURE, DISCUSSION, LABORATORY

A continuation of PHYS110. Topics include wave motion, electricity, magnetism, optics, and a survey of modern physics. Three lectures and one discussion session per week, as well as one laboratory every other week. The PHYS110-111 sequence is designed to fulfill the usual entrance requirements for medical and dental schools. Fulfills the Scientific Perspective. Mr. Landee/Offered every spring



**PHYS120 INTRODUCTORY PHYSICS – PART I/LECTURE, DISCUSSION, LABORATORY**

A laboratory based modern mechanics course for science majors. This is a newly redesigned course to include hands-on activities, computer-rich laboratories, group problem-solving and an interactive environment. Two two-hour integrated lecture/discussion/laboratory session per week. Coverage is more in-depth than PHYS110. Corequisite: MATH120 or 124. Fulfills the Scientific Perspective or Formal Analysis requirement. Mr. Kudrolli/Offered every fall

**PHYS121 INTRODUCTORY PHYSICS – PART II/LECTURE, DISCUSSION, LABORATORY**

A laboratory based course on electricity and magnetism for science majors. This is a newly redesigned course to include hands-on activities, computer-rich laboratories, group problem-solving and an interactive environment. Two two-hour integrated lecture/discussion/laboratory session per week. Coverage is more in-depth than PHYS111. Corequisite: MATH121 or 125. Fulfills the Scientific Perspective or Formal Analysis requirement. Mr. Kudrolli/Offered every fall

**PHYS123 METHODS OF PHYSICS / LECTURE, DISCUSSION**

This course covers the mathematical techniques needed for the study of physics at the intermediate and advanced level. Ordinary differential equations, vector calculus, partial differential equations, matrices, Fourier series, and complex variables. Prerequisites: MATH120/121. Physics majors are strongly encouraged to take this course during their sophomore year. Mr. Mukhopadhyay/Offered every fall

**PHYS127 COMPUTER SIMULATION LABORATORY/ DISCUSSION, LABORATORY**

Introduces object oriented programming and methods of computer simulation and its diverse applications. The course is project oriented, with students proceeding at their own pace depending on their background and interests. Projects include planetary motion, chaotic systems, fractal phenomena, random systems, complex systems, and thermal systems. Methods include the numerical solution of differential equations, molecular dynamics, and Monte Carlo techniques. Two laboratory sections and two discussion periods per week. Fulfills the Scientific Perspective. Prerequisites: PHYS120, MATH120 or 124, or instructor permission. No background in computer programming is required. Mr. Gould/Offered every spring

**PHYS130 OSCILLATIONS, WAVES AND OPTICS/ LECTURE, LABORATORY**

The third of a four-semester introductory survey of physics. The seminar meets for three hours per week plus an afternoon laboratory. Oscillations and harmonic motion, wave phenomena such as interference, diffraction and standing waves, plus ray and wave optics are some of the topics covered. Key experiments include studies of mechanical, acoustic and optical waves, wave resonance in oscillating systems, construction of optical instruments, and measurement of the speed of light. Prepares the student for the study of quantum systems in PHYS131. Fulfills the Scientific Perspective. Prerequisites: PHYS111 or 121. Corequisite: MATH130. Mr. Kudrolli, Mr. Landee/Offered every fall

**PHYS131 QUANTUM PHYSICS/LECTURE, LABORATORY**

The last in a four-semester survey of physics; intended to follow PHYS130. After an introduction to relativity theory, the course emphasizes the experimental basis of atomic and nuclear structure leading to the development of wave mechanics. The laboratory uses modern research instrumentation to investigate contributions by Einstein, Rutherford, Compton, Moseley, Chadwick and others. Fulfills the Scientific Perspective. Prerequisite: PHYS130; corequisite MATH131. Mr. Kudrolli, Mr. Landee/Offered every spring

**PHYS140 ENERGY AND THE ENVIRONMENT/LECTURE, DISCUSSION**

Discusses the central role of energy production, distribution and consumption in human activities, and the range of social, economic and political impacts that follow. Experiments and data analysis will be conducted using the University's campus physical plant as an extended laboratory. Fulfills the Scientific Perspective. Mr. Agosta/Offered periodically

**PHYS145 PHYSICS OF BIOMOLECULAR NETWORKS / LECTURE, DISCUSSION**

This course serves as an introduction to dynamical modeling in Biophysics and to physical principles underlying biological processes. The course will emphasize how the behavior of a biological system emerges from the interacting components. It will draw on examples from molecular, cellular, and developmental Biology, and from ecology, in order to explore physical and organizational principles that permeate different levels of biological organization, and will expose students to current research in Biophysics. The course should be of interest to Physics, Biology, Biochemistry, Mathematics and Computer Science majors. Prerequisites: MATH120 or MATH124, plus either PHYS110, PHYS120, or CHEM102. No prerequisite in the relevant biology is needed. Mr. Mukhopadhyay/Offered periodically

**PHYS150 STATISTICAL AND THERMAL PHYSICS/ LECTURE, DISCUSSION**

Introduces the concepts of thermodynamics and statistical mechanics with the goal of understanding the behavior of macroscopic systems on the basis of microscopic theory. Topics include probability, entropy and the second law of thermodynamics, the Boltzmann probability distribution, heat and work, and the first and second law efficiencies of simple engines. Prerequisite: PHYS130. Mr. Gould/Offered in alternate years

**PHYS160 CLASSICAL MECHANICS/LECTURE, DISCUSSION**

PHYS160 and 161 constitute an introduction to the concepts of classical physics at the intermediate level. Topics include particle and rigid body dynamics in inertial and noninertial reference frames. The necessary mathematical methods are introduced and applied. Prerequisites: MATH131 and PHYS111 or 121. Mr. Kudrolli, Mr. Mukhopadhyay/Offered in alternate years

**PHYS161 ELECTRICITY AND MAGNETISM/LECTURE, DISCUSSION**

Continuation of PHYS160. Topics include electro- and magnetostatics and electrodynamics through Maxwell's equations and relativity. Develops useful mathematical methods. Prerequisite: PHYS160. Mr. Landee, Mr. Mukhopadhyay/Offered in alternate years

**PHYS165 CONTINUUM MECHANICS/LECTURE, DISCUSSION**

An intermediate level course providing an introduction to fluid mechanics and elasto-mechanics. Applications of the theory to bird and insect flight, and swimming of large animals such as fish, and small organisms such as bacteria will be discussed. Locomotion in and on sand will be also discussed. Such an advanced course is necessary for students with interests in soft matter, elastomers, gels, granular materials, biophysics, and bio-mechanics. This course will be at the intermediate level. It will target physics and math majors, and biology majors with a strong math background. Typically students will take it in their junior or senior year. It will satisfy one of the physics elective requirements. Prerequisites: PHYS120/121, MATH 120/121, PHYS160. Mr. Kudrolli/Offered periodically

**PHYS171 ATOMIC AND NUCLEAR PHYSICS/LECTURE, DISCUSSION**

Intermediate-level course providing an introduction to quantum mechanics and its applications to atoms, nuclei, molecules, and solids. Prerequisites: PHYS131 and MATH131. Mr. Agosta/Offered in alternate years

**PHYS201 CLASSICAL DYNAMICS/LECTURE, DISCUSSION**

Designed to prepare students for graduate work in physics. Topics include Hamilton's principle, classical scattering theory, rigid body motion, canonical transformations, Hamilton-Jacobi theory, and mathematical methods of physics. Lectures are the same as PHYS301, but the assignments and evaluation are separate. Prerequisite: PHYS160 and 161. Staff/Offered every fall

**PHYS202 ELECTRODYNAMICS/LECTURE, DISCUSSION**

Designed to prepare students for graduate work in physics. Topics include boundary value problems in electrostatics and magnetostatics, electromagnetic-field equations and special relativity, electromagnetic waves, radiation theory, multipole fields, and mathematical methods of physics. Lectures are the same as PHYS302, but the assignments and evaluation are separate. Prerequisite: PHYS161. Mr. Mukhopadhyay/Offered every spring

**PHYS205 QUANTUM MECHANICS – PART I/LECTURE**

PHYS205 and 206 constitute a comprehensive introduction to the concepts of quantum mechanics and their application in physics and chemistry. Sequence prepares students for graduate work. Lectures are the same as in PHYS305, but the assignments and evaluation are separate. Prerequisites: PHYS171 and MATH131. Staff/Offered every spring

**PHYS206 QUANTUM MECHANICS – PART II/LECTURE**

PHYS206 is a continuation of PHYS205. Prerequisite: PHYS205. Staff/Offered every fall

**PHYS209 STATISTICAL MECHANICS/LECTURE, DISCUSSION**

Designed to prepare students for graduate work in physics. The lectures are the same as in PHYS309, but the assignments and evaluation are separate. Prerequisites: PHYS150 and 171. Staff/Offered every fall

**PHYS219 ELECTRONICS LABORATORY/LECTURE, LABORATORY**

Examines principles of modern electrical measurement and control. Introduces DC- and AC-circuit theory and use of test instruments such as multimeters and the oscilloscope. Emphasizes electronic circuit design, operational amplifiers and digital circuits. Two lectures and one laboratory each week. Suitable for intermediate-level undergraduates and graduate students in the sciences. Mr. Agosta/Offered every other year

**PHYS290 SENIOR SEMINAR/SEMINAR**

This capstone covers a selection of topics of current interest in physics. Offered for variable credit. Staff/Offered periodically

**PHYS299 DIRECTED STUDIES IN PHYSICS**

Independent student work in physics with the guidance of a faculty adviser. With permission of the instructor, students may enroll for senior capstone or honors projects, directed readings in areas not covered in regular courses, or independent research in theoretical, experimental or applied physics. Offered for variable credit. PHYS299 may be taken more than once. Staff/Offered every semester.

**PHYS301 CLASSICAL DYNAMICS**

Graduate-level course in classical mechanics. Topics are similar to PHYS201, but are treated in greater depth. Staff/Offered every fall

**PHYS302 CLASSICAL ELECTRODYNAMICS**

Graduate-level course in classical electromagnetism. Topics are similar to PHYS202, but are treated in greater depth. Staff/Offered every spring

**PHYS303 RESEARCH APPRENTICESHIP**

Students participate actively in an experimental or theoretical research group. Ph.D. students enroll in the course for three semesters with a minimum of one semester in a theoretical group and one semester in an experimental group. M.A. students take a minimum of one semester. Staff/Offered every semester

**PHYS305 QUANTUM MECHANICS – PART I/LECTURE, DISCUSSION**

PHYS305 and 306 offer a comprehensive introduction to quantum mechanics and its application in physics and chemistry. Topics include the foundations of quantum mechanics, symmetries and angular momentum, particle in a central potential, electron spin, and perturbation theory. Staff/Offered every spring

**PHYS306 QUANTUM MECHANICS – PART II/LECTURE, DISCUSSION**

PHYS306 is a continuation of PHYS305. Topics include scattering theory, interaction of radiation with matter, second quantization, applications to simple atoms and molecules, and an introduction to many-body theory. Staff/Offered every fall

**PHYS309 STATISTICAL MECHANICS/LECTURE, DISCUSSION**

Examines statistical mechanics with applications to physical systems. Topics include ensemble theory, the statistical basis of thermodynamics, quantum statistics, the virial expansion of a classical gas, ideal Bose and Fermi systems, the renormalization group, and fluctuations. Staff/Offered every fall

**PHYS310 SOLID STATE PHYSICS/LECTURE, DISCUSSION**

Examines experimental properties and the quantum theory of solids. Topics include crystal and reciprocal lattice structures, the free-electron theory of metals, electronic band structure and the Fermi surface, lattice vibrations and the elementary excitations of solids. Prerequisite: PHYS305 or permission of instructor. Mr. Landee/Offered every spring

**PHYS319 ADVANCED ELECTRONICS LABORATORY/ LECTURE, LABORATORY**

Similar to PHYS219, but more advanced. Topics are treated in greater depth. Suitable for graduate students in the sciences. Mr. Agosta/Offered every other year;

**PHYS320 ADVANCED SEMINAR IN PHYSICS**

Provides for special coverage of topics in physics of current research interest. Offered for variable credit. Staff/Offered periodically

**PHYS325 RESEARCH SEMINAR**

Student participation seminar on current research problems. Offered for variable credit. Staff/Offered periodically

**PHYS327 ADVANCED COMPUTER SIMULATION LABORATORY**

Similar to PHYS127 but more advanced. Suitable for graduate students in the sciences or undergraduates who have completed PHYS127. Prerequisite: PHYS127 or instructor permission. Mr. Gould/Offered every spring

**PHYS345 ADVANCED PHYSICS OF BIOMOLECULAR NETWORKS**

Similar to PHYS145, but more advanced. Topics are treated in greater depth. Suitable for graduate students in the sciences. Mr. Mukhopadhyay/Offered periodically

**PHYS365 ADVANCED CONTINUUM MECHANICS**

Similar to PHYS165, but more advanced. Topics are treated in greater depth. Suitable for graduate students in the sciences. Mr. Kudrolli/Offered periodically



### PHYS390 COLLOQUIUM

Weekly invited lecturers speak on current research topics. Required for all graduate students and recommended for undergraduates involved in research. Not offered for credit. Staff/Offered every semester

### PHYS397 RESEARCH

Thesis and dissertation preparation. Offered for variable credit. Staff/Offered every semester

## PSYCHOLOGY

### Program Faculty

Wendy S. Grolnick, Ph.D. - *Chair*

Michael Addis, Ph.D.

Michael Bamberg, Ph.D.

Nancy Budwig, Ph.D.

Esteban Cardemil, Ph.D.

James Cordova, Ph.D.

Maricela Correa, Ph.D.

Joseph de Rivera, Ph.D.

Rachel Falmagne, Ph.D.

Abbie Goldberg, Ph.D.

Lene Jensen, Ph.D.

James Laird, Ph.D.

Jaan Valsiner, Ph.D.

Marianne Wiser, Ph.D.

### Adjunct Faculty

Linda Kennedy, Ph.D.

### Part-Time Faculty

Leslie Bourne, Ph.D.

Robert Ciottone, Ph.D.

Cathleen Crider, Ph.D.

Jill Damon, Ph.D.

Stuart Fisher, Ph.D.

### Research Faculty

Jeffrey Arnett, Ph.D.

Elaine Reese, Ph.D.

Penelope Vinden, Ph.D.

### Clinical Faculty

Kathleen Palm, Ph.D.

### Visiting Faculty

Denise Hines, Ph.D.

Smita Srivastava, Ph.D.

### Emeriti Faculty

Roger Bibace, Ph.D.

David Stevens, Ph.D.

Nicholas Thompson, Ph.D.

### Program Overview

The department provides educational experiences that both contribute to liberal-arts education and prepare students for graduate work in psychology or related disciplines. The program emphasizes the role of psychological scholarship in understanding human behavior and experience. The program culminates in small and intensive capstone courses that offer students an opportunity to participate fully in the theoretical and research life of the department.

### Undergraduate Requirements

The seven introductory courses provide a foundation in the content and method of psychology and should normally be completed by the end of the sophomore year. The introductory courses include PSYC101 General Psychology, three methods courses, PSYC105 Quantitative Methods, PSYC108 Experimental Methods, and PSYC109 Qualitative Methods, and at least one course from each of three broad content areas of psychology. These are:

**Basic Processes (BP):** Courses in evolutionary psychology, physiological psychology, learning, sensation and perception, and cognition.

Choose from:

BIOL140 Biology of the Brain

BIOL141 Brain and Behavior

PSYC120 Human Cognition

PSYC130 Psychology of Learning

PSYC142 Sensation and Perception

PSYC145 Psychophysiology

**Development (DEV):** Courses in historical, cultural and human developmental psychology. Choose from:

PSYC150 Developmental Psychology

PSYC152 Adolescent Development

PSYC156 Cultural Psychology

PSYC157 Cultural Psychology of Urban Living

PSYC158 Discourse, Subjectivity and Self

**Social/Personality (S/P):** Courses in social, clinical, personality and abnormal psychology. Choose from:

PSYC170 Social Psychology

PSYC172 Psychology of Personality

PSYC173 Introduction to Abnormal Psychology

PSYC175 Introduction to Clinical Psychology

PSTD176 Introduction to Peace Studies and the Psychology of Peace

### Declaring a Psychology Major and Related Field

A student nearing the end of his or her sequence of introductory courses should come to the department office to declare a major and be assigned a psychology adviser. This formality will normally occur by the spring of a student's sophomore year. When declaring a major, a student must also choose a related field. The related field requirement reflects the conviction of the faculty that all academic areas are usefully related to psychology and that understanding the relation between psychology and another discipline requires knowing that other discipline in considerable depth. A related field is generally a recognized six-course concentration or minor. Alternatively, a student may adopt as a related field any pattern of six courses that his or her psychology adviser has approved as providing depth of knowledge in a discipline related to psychology.

### Mid-Level Courses

In addition to the above seven introductory courses, majors must take two mid-level courses that provide experience with the two fundamental activities of academic psychology, the analysis and interpretation of psychological literatures and the conduct of psychological investigations. Students complete at least one each of the following types of mid-level courses by the end of the junior year.

First Seminars focus on the attentive analysis of psychological texts, the articulation of opinions concerning psychological issues, and the use of library and reference skills in psychological writing. (Permission

to take a capstone seminar as a first seminar will not ordinarily be given and must, in any case, be obtained in writing in advance from the faculty member involved.) Choose one from numbers PSYC240-259.

Laboratories focus on doing psychological research including planning, data collection, analysis, interpretation and presentation. (Choose from numbers PSYC200-214.) The laboratory requirement may be fulfilled by taking a research course.

Research courses are opportunities to participate in faculty and/or graduate-student research projects, in all stages of the research process from conceptualization to presentation. The work normally terminates in an Academic Spree Day presentation and/or co-authorship of a scholarly paper or conference presentation. Students desiring to join a research course should make arrangements with a faculty sponsor well in advance. In approaching faculty members to make these arrangements, students should bear in mind that research courses are taken on as an addition to a faculty member's normal teaching load and space is limited. Choose from numbers PSYC215-235. In rare instances, this requirement may be met by research experience done for credit in another department. In such cases, PSYC101, 105, 108, and 109 must have been completed, and the proposed project approved before course registration and after course completion.

### Capstone Courses

Capstone courses provide an opportunity for students to participate more intensively in the analysis of a psychological literature or the pursuit of empirical research in psychology. Thus, the capstone requirement may be fulfilled by taking one of two kinds of courses.

Capstone seminars are open to undergraduates and are taught at or near the graduate level. Choose from numbers PSYC260-299.

Capstone Research: Students fulfilling the capstone requirement with a research course should notify the faculty member when they seek permission for the course. Capstone research students should expect to write a substantial research report describing the theory, methods, statistical method, results and conclusions of the project they conducted.

### Honors Program

Honors work in psychology is available as a three-semester honors sequence, beginning in the spring semester junior year, to students who have demonstrated high scholastic achievement and the ability to work as scholars. Students apply, in conjunction with a faculty sponsor, in the fall semester of their junior year by petitioning the department and providing a description of a proposed research project. Materials should be submitted to Professor James Cordova (jcordova@clarku.edu), who will then notify students whether the department's faculty committee has accepted them for admission. The honors sequence is a series of three capstone-style courses designed to provide honors students with more in-depth knowledge of the history of psychology, philosophy of science, psychological theory, and psychological methods of inquiry. Students in the program carry out an independent research project under the sponsorship of one or more faculty members. This research provides the basis for a thesis that, upon completion, is presented and defended by the student before an examining committee and the student's project advisor. The project is presented at a departmental honors research fair. Level of honors (Highest Honors, High Honors, or Honors in Psychology) is determined by the full department on the basis of recommendations from its examining committees.

The honors major should be especially, but not uniquely, attractive to students interested in pursuing graduate study in psychology or another related discipline such as medicine, teaching, and law.

This represents a change in the honors program. Other noteworthy points:

- Beginning in 2008-09, junior honors will be *required* in order to participate in senior honors. This means that anyone who wants to do an honors project in the academic year 2008-09 will have to be registered for Junior honors in the spring semester of 2008.
- Students interested in Study Abroad will be encouraged to spend the fall semester of junior year abroad and then participate in junior honors in the spring semester of junior year.

### Graduate Program

The M.A. degree is not required for completion of the doctoral degree. All students complete an independent research project by the end of their second year and present the results at a departmental conference. Students may choose to write up their research in the form of a master's thesis and submit it to the graduate school in order to receive an M.A. degree.

### Graduate Training in Clinical Psychology

The basic philosophy in the training of clinical psychology students, as for all graduate students in the department, is that specialization, necessary as it is, is a process of individualization and emphasis rather than one of restriction, isolation and compartmentalization. Our aim is to provide an integrated series of intensive educational experiences in class, laboratory and practicum clinical settings (in the University and in other agencies) in which specialist training in clinical psychology is attained along with increasing competence in general psychology, theory and research. It is our hope that these aims and training procedures will equip our graduates to deal with special problems in clinical psychology from the vantage point of knowledge about contents and methods of other areas of psychology. It is assumed that this perspective will develop inquiry-oriented psychologists with creative-integrative approaches to clinical problems and their relationship to psychological knowledge. We believe that such broadly trained psychologists can be flexible enough to meet the varied demands within the different settings in which the clinical psychologist currently functions and innovate conceptual approaches and methods of clinical psychology. The clinical-training program includes course work and practice with adults and children. In addition to more traditional training, the program offers opportunities in child clinical and marital-and-family intervention.

The program for the Ph.D. in clinical psychology has, in addition to the general requirements, the following special requirements. Each student must take at least one course from each of three areas:

- biological aspects of behavior (e.g., physiological psychology, behavior and evolution, human neuropsychology);
- cognitive-affective aspects of behavior (e.g., symbolism, cognitive development, logical reasoning, action and emotion); and
- social aspects of behavior (e.g., interpersonal relations, social cognition).

Each student must take PSYC311 Psychopathology, PSYC310 Theories of Psychotherapies, and PSYC393 Historical Backgrounds of Contemporary Psychology. Each student must complete a minimum of



one year of internship in clinical settings. All clinical students participate for four years in practicum training offered at the University or other agencies. For further information contact the director of clinical training, James Cordova at [jcordova@clarku.edu](mailto:jcordova@clarku.edu). The clinical-psychology program is currently accredited by the American Psychological Association (APA). For more information, the APA Committee on Accreditation can be contacted at 750 First Avenue, N.E., Washington, D.C. 20002-4242, (202) 336-5500, (202) 336-6123 TDD.

### **Graduate Study in Developmental Psychology**

The developmental psychology curriculum is intended to prepare students for a career in research, teaching and scholarly activity. It strives to impart both theoretical sophistication and competence in observational, experimental, interpretative and comparative inquiry with regard to developmental issues. Emphasized are ways of representing and examining all life phenomena, rather than focusing exclusively on a particular population (e.g., infants, children, adults) or a specific subject matter. In-depth study is offered with particular populations and in specific areas bridging social, cognitive and language development. Students with a concentration in developmental psychology are required to enroll for two semesters in PSYC300 Developmental Psychology Forum and take a series of six graduate developmental seminars. These eight courses satisfy, at the same time, the content courses requirement of the graduate program. Since there are no sharp separations between different areas within the department, students who work primarily in developmental psychology have the opportunity to study with other faculty in the department who have an interest in their area of specialization.

Distinctive features of the program include a strong interest in theoretical perspectives, a concern with the relationship between problems and methods of inquiry, and an attempt to place questions in their historical and cross-disciplinary contexts. Faculty interests intersect around topics in the development of psychological processes in societal and cultural context, specifically in the development of conceptualization and reasoning, in the study of social relations and interpersonal interactions, development of languages, symbolization and communication, and study of the relation of environmental conditions to functioning.

Research facilities in the department include a child-study area. There are opportunities for research in the schools and in other community settings. The Goddard Library has an extensive collection of books and journals going back to the inception of graduate study in psychology in the United States. Computer facilities are available on campus and in the department. For additional information about study in developmental psychology, write to Michael Bamberg [mbamberg@clarku.edu](mailto:mbamberg@clarku.edu).

### **Graduate Study in Social-Evolutionary-Cultural Psychology (SEC)**

Clark's program in Social, Evolutionary and Cultural Psychology integrates three perspectives. The social psychological perspective examines human interactions from the point of view of the experiences of self and the emotional feelings and action of the individuals that participate in them. At Clark, it includes the study of group dynamics, intergroup relations and societal peace and conflict. The biological-evolutionary perspective examines humans' interactions against the background of their evolutionary history, looking for enduring themes that persist in contemporary human social behavior. The cultural psy-

chological perspective examines the manner in which presuppositions arising from language, culture, and social and political ideology interact with our basic natures to produce human experience and behavior. The program encourages interdisciplinary research, as well as novel projects (e.g., our E-motion project) and research-action paradigms (such as our Peace Studies Program). Members of the SEC program, both faculty and students, work together to design courses that meet their interests, as well as those of the department as a whole. For further information, contact Joseph de Rivera at [jderivera@clarku.edu](mailto:jderivera@clarku.edu).

### **Graduate Study in Other Areas**

Other current interests of the faculty include feminist approaches to thinking and self, cognition and instruction, and the psychophysics of taste and smell. Teaching and research emphasize theoretical relevance and preserving and exploring the connections among areas of specialization. Faculty and students typically maintain extensive and regular interactions. In particular, most of the faculty have close connections with all the programs. The department also has education research ties with a number of institutions in the Worcester-Boston area (e.g., the Neuropsychology Unit of the Boston Veterans Administration Hospital, the Worcester Foundation for Experimental Biology, the University of Massachusetts Medical School), as well as other departments at Clark. For further information, write to the chair of the department, Wendy Grolnick at [wgrolnick@clarku.edu](mailto:wgrolnick@clarku.edu).

### **Frances L. Hiatt School of Psychology**

The Frances L. Hiatt School of Psychology, formed in 1987, has a major endowment provided through the generous support of the Hiatt family. The school, which encompasses the Department of Psychology with the Heinz Werner Institute for Developmental Analysis and the Department of Education, provides, in addition to Frances L. Hiatt Graduate Fellowships, opportunities for organizing and attending conferences and support for travel and research activities for the school's faculty and students.

### **The Heinz Werner Institute for Developmental Analysis**

Associated with the department is the Heinz Werner Institute for Developmental Analysis, which has three aims: to integrate various research programs dealing with developmental problems; to attract scholars, teachers and research workers from disciplines for which developmental problems are pertinent, such as anthropology, biology and certain areas of medicine; and to train research workers on post-doctoral levels in the comparative-developmental approach to behavior.

### **Doctoral Program General Requirements**

Only those students who plan to enroll in the Ph.D. program on a full-time basis are admitted for graduate work. The aim of the program is to provide students with a general integrated background covering the various areas of psychology. Specialization in several areas of study is available. Although a small department cannot reflect the entire spectrum of perspectives toward the study of psychology, a considerable number of theoretical orientations are demonstrated by the faculty. Important emphasis is placed on theoretically grounded inquiry and conceptually and methodologically rigorous research. In all programs, including the clinical program, there is a deep concern with conceptual analysis and theoretically grounded and directed inquiry. Unique is the diversity of methods of investigation used by faculty and graduate students in their work and the range of problems taken to fall within

the purview of psychologists. Students are acquainted not only with traditional experimental and naturalistic methods, but also with phenomenological, structural, hermeneutic and other methodologies. Participation in research is strongly encouraged, the nature of which is determined by interests a student shares with faculty members. Students are expected to contribute significantly to problem formulation, conceptualization, methodology, analysis and write-up of research work.

### **Advisers**

A faculty adviser will be assigned to help each student plan a curriculum to best meet individual needs and goals. The adviser may change or waive any of the requirements of specific training programs with department approval, but ordinarily the adviser's function is to assist students in selecting a curriculum from within the normal requirements. In addition to course selection, the adviser will work with the student to develop a portfolio of scholarly and professional accomplishments.

### **Course work**

Students ordinarily are expected to take four courses in each semester for their first two years, including PSYC301 Problem, Theory and Method in Psychology and PSYC302 Statistical Methods in their first year. In subsequent years, students continue to enroll in a full program which ordinarily includes three or four content courses and research and reading courses. A total of at least 16 one-semester content courses is required for admission to candidacy for the Ph.D. There are special course distribution requirements in effect for clinical students, and clinical applicants should consult the section on Training in Clinical Psychology for information about course requirements. Content courses include: all graduate seminars; clinical methods courses; Statistical Methods; Problem, Theory, Method; and courses numbered 300-379 and 390-399 (Topics are similar to capstone seminars but are treated in greater depth). Up to four directed-reading courses may be taken as content courses after the second year and with the supervising faculty member's approval.

### **Research in the First Year**

To encourage each student to become actively involved in research from the beginning of graduate training, a research apprenticeship program exists through which faculty and students can voluntarily begin working on research together during the first year. Participating faculty provide a brief description of current research projects in which students can become involved or notify students about when their project meetings are held. During the first two weeks of each year students have the opportunity to consider these projects and contact a faculty member to discuss becoming an apprentice in the described research project.

### **Qualifying Projects**

In order to advance to candidacy for the doctoral degree, students must complete six elements of a qualifying portfolio by the end of their third year in the program. Students are expected to complete two elements per year to stay on track towards completion of the portfolio. Elements may be papers written under the supervision of a faculty member, manuscripts submitted for publication, conference presentations or grant proposals. Students are expected to form a portfolio committee of three faculty members by the end of their first semester, with the primary research adviser serving as chair. The committee oversees and approves elements of the portfolio. The student is responsible for maintaining steady progress of the portfolio and for meeting

stated deadlines. Written feedback regarding progress on the portfolio will be provided bidirectionally each year by the student and the primary research adviser.

### **Examination in Statistical Methods**

Students are required to demonstrate competence in statistical methods by satisfactory performance on an examination in that area. The examination is normally taken in two parts during the student's first year, at the completion of each semester of the course in PSYC302 Statistical Methods.

### **Ph.D. Dissertation Proposal Defense**

Once in final form, the dissertation proposal will be presented and defended by the candidate in a meeting with the three faculty on the dissertation committee. This defense, which is based on questions and discussions (no presentation of the proposal) is intended to demonstrate the candidate's command of the relevant base and of the rationale of the proposed study, and the candidate is expected to be able to substantiate theoretical and procedural aspects of the research. It is expected that the proposal presented will be satisfactory in substance in most cases, since it will normally be developed in consultation with members of the candidate's dissertation committee.

### **Ph.D. Dissertation**

Students demonstrate the ability to conduct research by the presentation of an acceptable dissertation. The topic of the dissertation usually is selected by the student working with one or more members of the faculty. Once students have worked out a general research plan, a dissertation committee is formed to supervise and assist in all phases of the research effort, from articulation of the research design to the write-up of the final draft. After completion of the research, students submit a draft of the dissertation to the committee, which will aid students in making necessary revisions. At the point that the committee decides that the dissertation is complete and ready for presentation, the oral examination is scheduled.

### **Ph.D. Oral Examination**

Following submission of the dissertation, a final two-hour oral examination is held in which students present and defend their dissertation. The dissertation will be presented publicly to the psychology faculty and graduate students (and guests where appropriate), and open to questions from the faculty. The format is similar to that of a professional presentation (job talk or colloquium). The candidate is expected to demonstrate his/her ability to address questions on the theoretical frame, the substantive questions, and the findings of his/her work and on related matters, both from experts in their immediate area and from broadly informed members of the audience. The dissertation oral will include the committee and an additional two or three faculty members appointed by the department chair. The selected readers must be specialists in the field (at the level of Ph.D. or its equivalents), including affiliated, adjunct faculty, visiting and postdoctoral scholars, aside from full-time faculty. In case of expertise needed, committee members may be invited from other universities to participate in the final oral examination. Optimally, all faculty with generally related interest and knowledge will attend. The oral will be chaired by the department chair or designee. The Ph.D. must be completed in six years (excluding an internship year or official leave). An additional year may be granted by faculty approval of a petition on other grounds, such as part-time study because of financial necessity.



## Postdoctoral Opportunities

The Psychology Department is in the process of establishing a postdoctoral program in all areas where it currently offers doctoral degrees. International postdoctoral visitors have been the core of the present program, and federally funded postdoctoral positions for U.S. citizens are expected to be established in the near future.

## Courses

### HG5315 SOCIAL AND CULTURAL PSYCHOLOGY OF GENOCIDES/GRADUATE SEMINAR

See Psychology 315.

### IDCE30237 PSYCHOLOGY OF PEACEMAKING/FIRST SEMINAR

See Psychology 246.

### PHIL211 COGNITIVE SCIENCE/LECTURE, DISCUSSION

See Philosophy 211.

### PSYC101 GENERAL PSYCHOLOGY/LECTURE, DISCUSSION

Introduction to the principles of human behavior and to the various sub-disciplines of Psychology. No prerequisite. Unless otherwise noted, this course is a prerequisite to all other psychology offerings. Discussion attendance required. Ms. Goldberg, Mr. Cardemil/Offered every semester

### PSYC105 QUANTITATIVE METHODS/LECTURE, DISCUSSION

Introduction to descriptive and inferential statistics for the social sciences. Prerequisite: PSYC101. Staff, Ms. Hines/Offered every semester

### PSYC108 EXPERIMENTAL METHODS IN PSYCHOLOGY/LECTURE, DISCUSSION

Presents the principles of the scientific method and methods of experimental research in psychology. The relations between experimental design and quantitative analyses are examined. Students will participate in the design of an experimental study including a search of relevant literature, the collection of data and will submit a report of the experiment. This course is a prerequisite for all laboratory and research courses. Prerequisite: PSYC 101,105. Staff/Offered every semester

### PSYC109 QUALITATIVE METHODS IN PSYCHOLOGY/LECTURE, DISCUSSION

Covers the principles of engagement in qualitative inquiry—with particular emphasis on observing, interviewing, and analyzing people in interaction. Classes take the form of a mix between lecture and discussion, supplemented by an individually conducted observation project, and an interview that is carried out as a small group project. Prerequisite: PSYC 101Mr. Bamberg/Offered every semester

### PSYC120 INTRODUCTION TO COGNITION/LECTURE, DISCUSSION

The course provides an overview of some of the cognitive functions that comprise our mental life as we function in the world, such as thinking, concepts, memory, attention, language, problem solving and decision-making. We examine the mental processes that underlie these functions, and how those aspects of thought are interconnected. The objective of the course is to acquaint students with some of the concepts and findings cognitive psychologists have developed and to stimulate critical thinking about different theoretical approaches to psychology and about ways in which work from cognitive psychology can contribute to an understanding of human functioning in social and cultural context. The assumptions underlying the perspective of cognitive psychology are discussed and the extensions and contributions of that approach to sociocultural, clinical and developmental questions are explored. Prerequisite: Psyc 101 or permission. Ms. Joffe Falmagne/Offered every year

### PSYC130 PSYCHOLOGY OF LEARNING/LECTURE

Focuses on historical and current issues in the psychology of learning. Topics include classical and operant learning, the role of language and cognition, and continuity and discontinuity in human and nonhuman species. Staff/Offered periodically

### PSYC140 BIOLOGY OF THE BRAIN/LECTURE, LABORATORY, DISCUSSION

See Biology 140.

### PSYC141 BRAIN AND BEHAVIOR/LECTURE, DISCUSSION

See Biology 141

### PSYC142 SENSATION AND PERCEPTION/LECTURE, DISCUSSION

Sensation, perception and cognition work together to give us meaningful information about the world. This course examines how information is picked up from the environment and then coded, transformed and integrated by the sensory systems with special emphasis on vision. Topics include basic visual and auditory functions, vision abnormalities and deafness, taste, touch and pain, and how babies perceive the world. Ms. Wiser/Offered every year

### PSYC145 PSYCHOPHYSIOLOGY/LECTURE

Deals with how the activities of the body outside of the central nervous system interact with, reflect or produce psychological states and processes. Topics will include the functioning of the autonomic nervous system; techniques for measuring autonomic and other bodily activities; the role of bodily activities in emotions and other feelings; lie detection; the impact of stress on autonomic functioning and on immune system function; the effects of meditation, exercise and biofeedback on physiology and experience. Mr. Laird/Offered periodically

### PSYC150 DEVELOPMENTAL PSYCHOLOGY/LECTURE, DISCUSSION

Discusses the development of biological, cognitive and social functioning from conception to adolescence. Emphasizes and contrasts theoretical approaches to conceptualizing changes in developing children in light of current research. Ms.Jensen, Ms. Correa/Offered every semester

### PSYC152 ADOLESCENT DEVELOPMENT/LECTURE

This course is designed to introduce students to the major theories and research on adolescent development. The course emphasizes both individual development and cultural influences and encourages students to consider the influence of multiple settings, historical time, and individual differences on the adolescent experience. This course not only offers students the opportunity to learn in a text-and lecture-based setting, but also encourages students to draw upon their personal experiences, knowledge, and professional goals as guides for understanding the complexity of adolescent development and adjustment. Prerequisite: Psyc 101 Mr. Arnett/Offered periodically

### PSYC156 CULTURAL PSYCHOLOGY/LECTURE, DISCUSSION

Provides a systematic overview of knowledge about cultural organization of human psychological functions, and how psychology as a research discipline can study these functions. Strong theoretical and methodological orientation is included. Mr. Valsiner/Offered every spring

### PSYC157 CULTURAL PSYCHOLOGY OF URBAN LIVING/ LECTURE, DISCUSSION

The focus is to provide the students with skills of observational research in culturally structured open spaces (urban settings). Research tasks will be set up for the students in different cultural contexts in the local environment. The students will carry out an observational and a naturalistic-experimental study and write a research report. Fulfills the Comparative Perspective. Prerequisite: PSYC101 Mr. Valsiner/Offered periodically

**PSYC158 DISCOURSE, SUBJECTIVITY AND SELF/LECTURE, DISCUSSION**

Provides a multiple perspective approach to subjectivity and the self: biological, cognitive-experimentalist, experiential, social constructionist and psychodynamic. Examines the role of discourse in how the self is constructed with special emphasis on developmental aspects.

Mr. Bamberg/Offered periodically

**PSYC170 SOCIAL PSYCHOLOGY/LECTURE, DISCUSSION**

Examines love, fear, conflict and other basic processes involved in group dynamics, interpersonal relations, community psychology, inter-group relations, organizational behavior and the interface between human nature and culture. These basic processes are related to the attempt to achieve a world of peace and justice. In addition to quizzes and a final exam, students are asked to apply their knowledge of basic processes in a personal or political action. Prerequisite: PSYC101 or instructor's permission. Staff/Offered periodically

**PSYC172 PSYCHOLOGY OF PERSONALITY/LECTURE**

Considers theories regarding behavioral differences among persons in response to the same or similar situations: includes typological, trait, psychoanalytic, traditional and neobehavioristic, and personological conceptions. Mr. Cordova, Staff/Offered periodically

**PSYC173 INTRODUCTION TO ABNORMAL PSYCHOLOGY/LECTURE, DISCUSSION**

Discusses the manner in which abnormal behavior has been traditionally defined and the implications of these definitions. Provides a comprehensive overview of the major categories of abnormal behavioral disorders with an emphasis on theory and research (e.g., schizophrenia, affective disorders, substance abuse, eating disorders, etc.). Special attention is paid to issues of assessment, intervention, legal issues and prevention. Prerequisite: Psyc 101 Ms. Grolnick, Mr. Cardemil, Mr. Addis/Offered periodically

**PSYC175 INTRODUCTION TO CLINICAL PSYCHOLOGY/LECTURE, DISCUSSION**

Surveys various approaches to clinical assessment and intervention. Emphasizes the assumptions underlying alternative approaches and the actual activities of clinical psychologists. This course also covers special topics including ethics, health psychology, clinical neuropsychology and forensic psychology. Prerequisite: Psyc 101. Mr. Addis, Ms. Palm, Staff/Offered periodically

**PSYC176 INTRODUCTION TO PEACE STUDIES/LECTURE, DISCUSSION**

See Peace Studies 101.

**PSYC193 DISCOURSE, SELF AND FEELING/FIRST-YEAR SEMINAR**

This seminar explores how people make sense of themselves by what they say and how they say it ('discourse') - with a focus on how teenage boys construct themselves as "male." Since this course carries the Language and Culture Perspective, it is expected that students will acquire the basic skills in grammar and syntax necessary for in-depth analyses of discourse. Students will be expected to commit themselves to a high-level academic atmosphere and to a challenging workload that will result in stimulating class discussions. Fulfills the Language and Culture Perspective requirement. Mr. Bamberg/Offered periodically

**PSYC 194 FOUNDATIONS OF PSYCHOLOGY/FIRST-YEAR SEMINAR**

This seminar is for first-year undergraduates who are interested in majoring in psychology and who want to gain in-depth insight into the science of psychology in its contemporary state. The students will meet with the seminar leader—psychology faculty—weekly and will cover the introductory materials into psychology through discussion and writing of research papers. Mr. Valsiner/First Year Seminar/Offered periodically

**PSYC 196 PSYCHOLOGY THROUGH HISTORY/FIRST-YEAR SEMINAR**

This seminar for first-year undergraduates will help students get a head start for a future in psychology from an interdisciplinary focus. This course entails the investigation and discussion of great literary and philosophical works that have a profound influence on today's academic psychology. Students will learn the contextual relevance that surrounds the past and present. Students will also learn to efficiently and rigorously investigate and report on texts significant to psychology. Fulfills the Historical Perspective. Staff/First Year Seminar/Offered periodically

**PSYC 240 PSYCHOLOGY OF NONVIOLENT PERSONAL AND SOCIAL STRUGGLE/FIRST SEMINAR**

This course considers the growing literature on personal and societal nonviolence. The first third of the course examines ideas about nonviolent communication, empathy, nonviolence in American literature, and the pragmatic investigation of historical nonviolent social struggles. This course will also consider the strategy of nonviolence, current nonviolent actions, and how nonviolent theory might be applied in contemporary struggles. Mr. de Rivera/Offered periodically

**PSYC241 PHILOSOPHY OF PSYCHOLOGY/LECTURE, DISCUSSION**

See Philosophy 243.

**PSYC 242 PSYCHOLOGICAL PERSPECTIVES ON CRIMINAL BEHAVIOR/FIRST SEMINAR**

Examines various types of criminal behavior according to psychological theories. We first will discuss major psychological theoretical perspectives on crime, including psychobiological theories, personality theories, learning theories, and developmental theories. We will then discuss the intersection between various mental disorders and criminal behavior. The third part of the course will address specific types of crime, including sex offending, serial killing, terrorism, and battering. The semester ends with a discussion of various legal issues related to mental health, including insanity and competency. Ms. Hines/Offered periodically

**PSYC 243 HUMAN DEVELOPMENT AND CULTURE/FIRST SEMINAR**

This course examines the ways an individual's psychological and social development takes place in a cultural context. Readings include qualitative and quantitative studies of different parts of the life span in diverse cultures (such as India, Guatemala and the United States). While most readings are drawn from psychology, some readings are by writers in anthropology and philosophy. PSYC 101 and 150. Ms. Jensen/Offered periodically

**PSYC 244 COGNITIVE DEVELOPMENT/FIRST SEMINAR**

This seminar explores the perceptual and cognitive abilities of babies and young children. How does their knowledge of physical objects, space, the biological world, number, and people's minds and behaviors evolve? How does their ability to imitate and communicate develop? How do they learn to categorize and label objects? How does reasoning and problem solving change with age? Different theoretical approaches will be considered, especially with respect to the role of experience, innate factors and cultural factors in development. PSYC120, 150 or Instructor's permission. Ms. Wiser/Offered periodically

**PSYC 245 CULTURAL COMPARISONS IN PSYCHOLOGY AND ANTHROPOLOGY/FIRST SEMINAR**

Examines the logic of making comparisons between societies and persons. Brings together empirical evidence from psychology and history of culture and cultural anthropology, and provides an interpretive framework for making sense of such evidence. Different uses of knowl-



edge about comparisons of societies within a society (in the United States or other countries) in the hands of peace- (or war-) makers, social-policy planners, etc. will be discussed. Prerequisites: some introductory geography course, PSYC101 and 156 or Instructor's permission. Mr. Valsiner/Offered periodically

**PSYC 246 PSYCHOLOGY OF PEACEMAKING/FIRST SEMINAR**

Examines the formation of social identity and how social identities may involve us in either violence or peace. Topics include psychological, psychoanalytic, sociological, and political approaches to identity and the role collective identity plays in post-conflict reconciliation and development. Prerequisite: PSYC176, PSTD101, ID101 or Instructor's permission. Mr. de Rivera/Offered periodically

**PSYC247 THEORETICAL MODELS OF COMMUNICATION IN PSYCHOLOGY/FIRST SEMINAR**

Provides students with systematic knowledge about the ideas of communication as these have moved between psychology, anthropology, language philosophy, sociology and cultural studies. Mr. Valsiner/Offered periodically

**PSYC 248 EVOLUTIONARY PSYCHOLOGY/FIRST SEMINAR**

An introduction to intellectual history and contemporary data concerning the idea that human behavior is determined by its evolutionary history. Instructor's permission. Mr. Valsiner/Offered periodically

**PSYC249 WOMEN IN SOCIETY/FIRST SEMINAR**

Examines how women's psychological functioning and development can be understood in societal context, with a central attention to differences as well as commonalities among women. To examine the workings of the societal context, we discuss anthropological and sociological studies of women's status in various societies and of different women's status within a given society and we examine how gender, race/ethnicity and class operate jointly in structuring societies and cultures. The focus of the seminar is on how economic, historical and cultural processes impinge on the individual, for example how cultural representations of femininity and masculinity, the workings of social institutions, or language as the symbolic carrier of meaning, configure social life and individual subjectivity, and we discuss the interconnections between those social and cultural processes. We center on individual women's functioning within that context, covering such topics as women's personal development, life issues of women, intellectual functioning, personal power, and women's roles and functions in society, including issues relating to role choices and adult development. The objective of the course is to guide students to approach individual functioning and development as the functioning of social agents participating in, and shaped by a complex social and cultural world. Ms. Joffe Falmagne/Offered every year

**PSYC250 GENDER, FAMILIES AND CLOSE RELATIONSHIPS/FIRST SEMINAR**

The primary objective of this seminar is to explore how intimate family relationships change and develop over time, and the role of gender in understanding close relationships. We will examine how popular culture and everyday family life reflect and perpetuate patterns of gender inequality. Gender relations and family life are so intertwined it is impossible to understand one without paying attention to the other. We will explore concepts such as gender, family, masculinity, and femininity, to name just a few. In addition, we will examine the ways that larger social, economic and political structures shape the meanings we give to family, gender and close relationships. Seminar

participants are expected to engage fully with the readings and actively participate in class discussion. Prerequisite: PSYC101 Ms. Goldberg/Offered periodically

**PSYC251 LANGUAGE DEVELOPMENT/FIRST SEMINAR**

A comprehensive survey of the basic issues and topics involved in the study of language development with a focus on connections to social and cultural factors. The course begins with an examination of early and influential theories of language development. Against this background we then turn to the question of how children acquire language, with special emphasis on the relationship to cognitive and social development, as well as evolutionary and comparative work. Prerequisite: PSYC150. Ms. Budwig/Offered periodically.

**PSYC 252 LEARNING PSYC THROUGH TEACHING/FIRST SEMINAR**

This seminar is intended for junior and senior psychology majors who have a career interest in teaching. Exceptional sophomores may be considered. Students in this seminar will serve as Peer Learning Assistants (PLAs) for PSYC 101, where the primary tasks will include working with students and facilitating group projects. Through their participation in this seminar and their activities as PLAs for PSYC 101, students will actively re-engage with basic concepts in psychology, and gain a deeper understanding of this material as well as acquire a broader perspective of the field. In addition to learning general material related to the teaching of psychology, the PLAs will receive support and guidance in their work with PSYC 101. This guidance will cover a range of topics, including assisting undergraduates with writing, using Blackboard, and leading class discussions. Moreover, the PLAs in this class will receive specific mentorship and guidance to assist them in leading the group projects that will be an integral part of PSYC 101. Cap of about 15. Offered every semester. Registration will be by instructor permission only. Applications may be picked up in the Psychology Department Main Office.

**PSYC254 GENDER DEVELOPMENT AND LANGUAGE/FIRST SEMINAR**

Explores the language-gender relationship in children and adolescents, with special focus on the "social becoming" of males and females. Traditional theories of gender and language development will be explored and contrasted with discursive approaches that link gender and language to issues of self and identity formation. A practical project (observational or interview-based) will form a central piece of this course. Prerequisites: any BP/DEV/SP course (PSYC120-176) and instructor's permission. Mr. Bamberg/Offered periodically

**PSYC 255 EXPERIMENTAL SOCIAL PSYCHOLOGY/FIRST SEMINAR**

The course will explore in some depth the contributions of experimental research to understanding various social psychological phenomena, including conformity and obedience; cognitive dissonance; self-concepts; impression formation and attribution; liking and interpersonal attraction; prejudice and stereotyping; social dilemmas; aggression; helping and altruism; and others. Each student will write a paper and lead a discussion on one such topic, which he or she will select. All students will read these papers and selected works in these topic areas. Mr. Laird/Offered periodically

**PSYC256 THE PSYCHOLOGY OF COUPLES AND INTIMACY/FIRST SEMINAR**

This course presents the scientific study of couples' intimate relationships. The course provides a broad overview of what is currently known about adult romantic relationships, mate selection, intimacy development, marriage, relationship distress and divorce. Mr. Cordova/Offered periodically

**PSYC257 TEACHING PSYC AS A WAY OF LEARNING/FIRST SEMINAR**

This First Seminar is for mid- and upper-level psychology majors who have taken either PSYC 107 or PSYC 109. Students in PSYC 257 will serve as Peer Learning Assistants (PLAs) for PSYC 109, where the primary tasks will be to organize sections and classes around the following three inquiry-based tasks: (i) getting students actively involved in discussions in section and on Black Board; (ii) helping students to organize (and stay on top of) their observation projects; and (iii) support and guide a group of six students through an inquiry-based interview project. The goal for participants in PSYC 257 is to learn to conduct and guide small group projects and discussions and through this activity deepen their understanding of qualitative, inquiry-based, psychology. This will be achieved by weekly meetings to go over the experiences of PLAs and preparing the upcoming projects. This class can be taken on a pass/fail basis, or by way of earning a grade through a write-up of a final paper that is based on the teaching/learning experience. Registration will be by instructor permission only. Mr. Bamberg/Offered every semester.

**PSYC258 EMERGING ADULTHOOD: DEV. FROM LATE TEENS THROUGH THE 20s/FIRST SEMINAR**

This course focuses on development from ages 18 to 29, a period of the life course now known as "emerging adulthood." Topics explored include family relationships, friendships, love and sexuality, school and work transitions, religious beliefs, and views of what it means to become an adult. The course is international in scope, highlighting differences between industrialized and developing countries. Perspectives from psychology, sociology and anthropology are considered. Mr. Arnett/Offered periodically

**PSYC259 PSYCHOTHERAPIES/FIRST SEMINAR**

This course provides an overview of the major theoretical approaches to conducting psychotherapy. There is a strong emphasis on diversity issues in psychotherapy throughout the course, as well as ongoing consideration regarding how therapeutic interventions can be evaluated empirically. Students are exposed to the various therapeutic approaches through primary source readings, class illustrations and discussion, videos, and a final research paper. Prerequisites: PSYC101, 105, 108, 109. Mr. Cardemil/Offered periodically

**PSYC260 NARRATIVE PERSPECTIVE IN PSYCHOLOGY/CAPSTONE SEMINAR**

Employing a proseminar format, this course examines the emergence of narrative or story construction as an increasingly influential and integrating paradigm within psychology and allied social sciences. Topics will include the conceptual foundations of the narrative perspective in a broad historical and thematic review and contemporary understandings of narrative including methods of analysis, autobiographical memory, self-narrative and identity development. Finally, students will research a topic of their own choosing in which narrative serves as a basic analytic or organizing principle. Mr. Bamberg/Offered periodically

**PSYC261 NEUROPSYCH:BIO OF BEHAVIOR/CAPSTONE SEMINAR**

This course provides a broad overview of neuropsychology for undergraduate and graduate students. The goal of the course is to provide students with knowledge of brain and behavior relationships. Students will learn how the brain governs primary cognitive domains such as memory, attention, executive functions, and intelligence. We will also examine the neuropsychological tests used to evaluate the various cognitive domains, students will become familiar with the format and type

of information provided in neuropsychological reports, and we will discuss some of the disorders typically seen in individuals referred for neuropsychological evaluations such as dementias, traumatic brain injury, learning disabilities, ADHD etc. Staff/Offered periodically

**PSYC262 INTRODUCTION TO IDIOGRAPHIC SCIENCE/CAPSTONE SEMINAR**

Analysis of single-case based research and applications in psychology. Brings together contemporary knowledge from clinical sciences, anthropology and classic psychology, and analyzes the role of the researcher in the process of scientific investigation. Instructor's permission. Mr. Bibace/Offered periodically

**PSYC265 PSYCHOLOGY OF MEN/CAPSTONE SEMINAR**

Explores topics related to the social learning and social construction of masculinity and the male gender role in different social contexts including families, friendships, mental and physical health, sports, and intimate relationships. Mr. Addis/Offered periodically

**PSYC268 COMMUNICATIVE DEVELOPMENT/CAPSTONE SEMINAR**

Focuses on various approaches to an understanding of human communication from an interdisciplinary perspective. Explores the relationship between social, cognitive and linguistic factors in children's communicative development. Prerequisite: PSYC150 and a first seminar. Ms. Budwig/Offered periodically

**PSYC270 ADVANCED TOPICS IN SOCIAL PSYCHOLOGY/CAPSTONE SEMINAR**

An intensive treatment of selected areas in social psychological research and theory, including consistency theories in attitude formation and in interpersonal perception; attribution theory in self-perception; and social/situational determinants of normal, everyday behavior and of antisocial behaviors such as violence, criminality and riots. Ordinarily limited to senior majors in psychology or sociology. Instructor's permission. Mr. Laird/Offered periodically

**PSYC272 IDENTITY FORMATION/CAPSTONE SEMINAR**

Explores the construction of adolescent and male identities in socio-historical contexts. Particular emphasis is placed on the sociohistorical concepts of adolescence and masculinity as discourses, and how young males between 10 and 15 years of age position themselves vis-à-vis these discourses in their own talk. Prerequisite: PSYC214 or 253. Mr. Bamberg/Offered periodically

**PSYC275 SOCIETAL APPROACHES TO THINKING/CAPSTONE SEMINAR**

This capstone seminar provides a theoretical and methodological frame for studying how thinking is shaped by the societal context in which the person is situated, by the social location the person occupies in that context, by the cultural discourses in which he/she participates, and by the nature of what is being thought about. The seminar draws from readings from interdisciplinary sources, including psychology. We start with illustrative works from developmental psychology, sociocultural psychology and social psychology that approach thinking and reasoning in their social and cultural contexts. We also examine some works that do not emphasize the social context of thinking but that examine everyday thinking about social problems. We then discuss interdisciplinary writings that emphasize how societies and cultures are structured internally in terms of gender, race and class, and we examine empirical research on thinking and on personal epistemology that is grounded in this kind of societal framework. The last class of the semester will be a symposium in which each student will present her or his final paper in a 15-minute formal presentation, followed by class discussion. Instructor's permission. Ms. Joffe Falmagne/Offered periodically



**PSYC276 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY/CAPSTONE SEMINAR**

Devoted to a specific subtopic unique for each semester. Designed for seniors and graduate students. Official permission not needed, but contact the instructor for specific topic. Prerequisite: PSYC101 or COMM101 Mr. Valsiner/Offered every fall semester

**PSYC279 BASIC DEVELOPMENTAL THEORIES/CAPSTONE SEMINAR**

Provides a systematic overview of core ideas in the selected theories and guides students to analyze these from the viewpoint of how theories relate to phenomena of development as well as empirical research practices. Instructor's permission. Mr. Valsiner/Offered periodically

**PSYC280 MORALITY & CULTURE/CAPSTONE SEMINAR**

This course examines the development of moral reasoning and emotions from infancy through adulthood in diverse cultures. This includes a focus on key theories, methods, and research findings. Readings are primarily from psychology but also from anthropology, philosophy, and sociology. Prerequisites: PSYC 150 and a First Seminar. Ms. Jensen/Offered periodically

**PSYC283 HISTORICAL BACKGROUND OF CONTEMPORARY PSYCHOLOGY/CAPSTONE SEMINAR**

Includes an appreciation of the generative ideas and world hypotheses underlying contemporary psychological approaches and traces the earlier manifestations of these ideas and world hypotheses in intellectual history or history of ideas. Instructor's permission. Mr. Valsiner/Offered periodically

**PSYC284 RESEARCH INTERVIEWING/CAPSTONE SEMINAR**

Interviewing is frequently relied upon as a method for obtaining data in studies. Interviews are also an intrinsic aspect of many disciplines in the faculty of arts and sciences as well as medicine. The course will review traditions utilized by various disciplines (ethnographic; medical interviewing including history-taking in medicine; focus groups in political science and so on) and diverse specialties in psychology including clinical, developmental and industrial psychology. This course will be open to advanced undergrads and doctoral students in psychology. Instructor's permission. Mr. Bibace/Offered periodically

**PSYC285 EMOTION AND INTERPERSONAL RELATIONSHIPS/CAPSTONE SEMINAR**

What are emotions and how do they affect our behavior and our relationships? The course examines a number of theories. Prerequisite: First Seminar and Instructor's permission. Mr.de Rivera/Offered periodically

**PSYC288 SPECIAL TOPICS IN PEACE PSYCHOLOGY/CAPSTONE SEMINAR**

The UN General Assembly has asked both nations and people to begin creating a culture of peace for the world's children. How might we go about that challenging task? This course begins by considering the task from the perspectives of anthropology, economics, political science, psychology, and sociology. It then takes a critical look at each of the eight bases for a culture of peace proposed by the UN. Finally it examines 12 specific ways or paths that may be used to create these bases and a culture of peace. We shall pay particular attention to the relevant psychological literature. Prerequisites: Instructor's permission. Mr. de Rivera/Offered periodically

**PSYC290 MOTIVATION AND SELF-REGULATION/ CAPSTONE SEMINAR**

Explores the motivation of human behavior (i.e., what energizes and directs our actions). Examines theoretical and empirical works relevant to motivation, particularly those emphasizing an active organism. Also applies motivational theories to various areas, including education, work, sports, psychopathology and psychotherapy. Prerequisite: First Seminar. Ms. Grolnick/Offered periodically

**PSYC295 ADVANCED TOPICS ON GENDER AND SOCIETY/CAPSTONE SEMINAR**

This capstone seminar examines selected issues in the study of gender in its societal matrix, where gender is understood in its intersection with race, class and ethnicity. The seminar draws from interdisciplinary resources and systematically guides students into scholarly research on specific topics in these areas. Along with class readings and discussions on issues of theory and methodology, students will select a topic of their choice to research in-depth and discuss their findings with the class weekly. The course is suitable for psychology seniors and students from other disciplines or programs who wish to pursue psychological questions in this area. Prerequisites: Instructor's permission. Ms. Falmagne/Offered periodically

**PSYC296 WHAT CHILDREN KNOW/CAPSTONE SEMINAR**

Examines the evolution of children's knowledge about the physical world; the biological world; language, number and other symbolic systems; and the social world. How do infants' and children's perceptual and cognitive abilities interact with input from caretakers to advance their knowledge? How do symbolic systems such as language and writing get internalized? Related topics are the evolution of language in the human species, the history of number and writing systems and animal cognition. Prerequisites: PSYC120 or 150. Ms. Wiser/Offered periodically.

**PSYC300 DEVELOPMENTAL PSYCHOLOGY FORUM/ GRADUATE SEMINAR**

Devoted to the presentation and critique of different approaches to the individual and his or her ways of functioning in the world. The approaches considered may include: Piagetian, nativist, feminist or cultural/historical approaches, or may stem from interdisciplinary perspectives on a selected theme. The aim is to acquaint the participants with sympathetic expositions of several points of view and the application of these viewpoints to some selected topic of inquiry. Different topics are discussed in different years. Mr. Bamberg, Ms. Budwig, Ms. Falmagne, Mr. Valsiner, Ms. Wiser, and others/Offered every year

**PSYC301 PROBLEM, THEORY AND METHOD/GRADUATE SEMINAR**

During the first semester, each faculty member meets once with the class to discuss his or her perspectives and research. Students prepare brief reports characterizing the links among each faculty member's perspective, research, problems and methods. During semester two, students formulate proposals, and the methods and ethics of research are discussed. Ms. Wiser, Mr. Addis/Offered every semester

**PSYC302 STATISTICAL METHODS/GRADUATE SEMINAR**

The first semester is devoted to a review of the basic concepts of statistics, such as probability, statistical inference, sampling distribution, t-test and regression, and to nonparametric statistics. The second semester introduces analysis of variance and experimental design. Ms. Wiser, Ms. Hines/Offered every year

**PSYC303 ASSESSMENT/GRADUATE CLINICAL SEMINAR**

Introduces measurement in clinical psychology (first semester) and intellectual and projective testing with adults (second semester). Ms. Crider/Offered every year

**PSYC304 CHILD ASSESSMENT/GRADUATE CLINICAL SEMINAR**

Focuses on the administration and interpretation of various assessment instruments for children. Includes intelligence and personality testing and diagnostic interviewing. Mr. Ciottoni, Ms. Grolnick/Offered every year

**PSYC305 PSYCHOLOGY OF CONFLICT AND CULTURES OF PEACE/GRADUATE SEMINAR**

This course begins with an examination of the literature on intergroup conflict and reconciliation, moves to a consideration of cultures of peace, and concludes by studying a model of societal dynamics and social change that describes how individual action and collectively held emotions influence the development of institutions and communities that promote a culture of peace. Mr. de Rivera/Offered periodically

**PSYC306 QUALITATIVE/INTERPRETIVE METHODS/GRADUATE SEMINAR**

A graduate-level introductory seminar into qualitative research, its conceptual roots, covering the ontological and epistemological concerns, but centering on the methodological issues surrounding contemporary psychological research. Textbook readings will be supplemented with contemporary articles on ethnography, ethnomethodology, discourse and narrative analysis. Mr. Bamberg/Offered periodically

**PSYC308 SOCIAL, EVOLUTIONARY, CULTURAL FORUM/GRADUATE SEMINAR**

This is a forum on research and theory in social, evolutionary and cultural psychology in which SEC members discuss theoretical and methodological problems, plan new research and share updates on ongoing projects. The SEC forum is also the home of the E-motion Project which explores computer projected minimal social phenomena such as the Heider Films. Mr. de Rivera, Mr. Laird, Mr. Valsiner/Offered periodically

**PSYC310 THEORIES OF PSYCHOTHERAPY/GRADUATE SEMINAR**

This course provides an overview of the major theoretical approaches to conducting psychotherapy. There is a strong emphasis on diversity issues in psychotherapy throughout the course, as well as ongoing consideration regarding how therapeutic interventions can be evaluated empirically. Mr. Cardemil/Offered every other year

**PSYC311 PSYCHOPATHOLOGY/GRADUATE SEMINAR**

Examines the difficulties of defining psychopathology and reviews the major diagnostic categories currently in use from a phenomenological, theoretical and research perspective. Special attention is given to gender, class and diversity issues. Staff/Offered every other year

**PSYC312 CHILD PSYCHOPATHOLOGY IN CONTEXT/GRADUATE SEMINAR**

In this course, we will approach child and adolescent psychopathology with special attention to how difficulties in adjustment and mental health develop over time. We will pay special attention to the risk and protective factors associated with various problems of living and problems of adjustment. In addition, we will take a contextual or ecological approach to developmental psychopathology—that is, we will consider the relevant contexts in which the problem develops and in which intervention or treatment should be pursued (e.g., families, schools, neighborhoods). In turn, we will discuss the utility and effectiveness of various treatments and interventions including individual therapy, group therapy, family approaches, and within-school prevention and intervention. Ms. Goldberg/Offered periodically

**PSYC315 SOCIAL AND CULTURAL PSYCHOLOGY OF GENOCIDES/GRADUATE SEMINAR**

This is a basic graduate seminar on the socially relevant topic of how human beings can be brought to act violently against other human beings in specific socially defined contexts. We look at contexts specifiable as genocides and analyze the various ideologically oriented efforts to apply (or not apply) that term to specific situations. The place where genocides happen may vary—these occur in any country, community, or even small group. This seminar belongs to the thematic

field of cultural psychology of political actions. Such psychology cannot be advanced from any political standpoint, but needs to be constructed on a metapolitical basis. Mr. Valsiner/Offered periodically

**PSYC317 MORAL DEVELOPMENT/GRADUATE SEMINAR**

Attempts to integrate the literatures on moral development and prosocial behavior. Four problems are considered: (1) the relationship between justice and caring; (2) the social development of empathy and responsibility and the personal development of a moral identity; (3) the tension between the search for moral universality and the fact of cultural differences; (4) and the relationship between abstract moral reasoning and concrete moral action. Mr. de Rivera/Offered periodically

**PSYC318 SYMBOLIC DEVELOPMENT IN CHILDREN AND HISTORY/GRADUATE SEMINAR**

This course will be of interest to students interested in child development, cognition, and the history of human knowledge. The topic, early symbolism (in the historical as well as ontogenetic sense), has a rich history at Clark University, as well as contemporary relevance in cognitive psychology. We will examine some of the following areas: the development of symbolic communication, of number, and of writing in children and in history; magic and myths; symbolic play; symbolic representations in alchemy and modern science; children's understanding of models, maps and graphs; and various aspects of mental representations in cognitive science. Ms. Wiser/Offered periodically

**PSYC320 ADVANCED TOPICS IN COMMUNICATION/GRADUATE SEMINAR**

Provides an overview of theory and research in the area of language development with special focus on functional approaches. Topics vary from year to year. Ms. Budwig/Offered periodically

**PSYC323 THEORY AND RESEARCH IN SOCIAL AND EMOTIONAL DEVELOPMENT/GRADUATE SEMINAR**

Explores theories and research on the socialization and individuation (and their interaction) of the developing infant, child and adolescent. Highlights contributions of the child, family, the larger sociocultural context and their interplay. Topics covered include parent-child attachment, temperament, peer relations, self-development and sex-role socialization. Emphasizes research methods and analysis in developmental research (e.g., modeling growth and change). Ms. Grolnick/Offered periodically

**PSYC325 CONCEPTS AND THEORIES IN CONCEPTUAL DEVELOPMENT/GRADUATE SEMINAR**

Examines the development of children's knowledge about the physical, biological and social worlds from a cognitivist perspective. Topics include the structure and content of infants' knowledge, processes of knowledge acquisition, relations between individual and cultural knowledge. Related topics include: evolutionary perspectives on knowledge development, concept theory change in history of science, and conceptual change in science and math classrooms Prerequisite: permission of instructor. Ms. Wiser/Offered periodically

**PSYC326 FEMINIST PERSPECTIVES ON SELF, MIND, IDENTITY AND DEVELOPMENT/GRADUATE SEMINAR**

In this seminar, we survey several strands of feminist scholarship that address how mind, self and identity are constituted and develop in societal context. A central tenet is that gender, as a social formation intersecting with others, such as race and class, structures the social and cultural order both discursively and materially; psychological functioning and development are considered within that systemic frame-



work. Feminist theories vary in particular in how they address the role of practice, discourse, social power relations and individual agency in the development of self, mind and identity; how they address the intersectional nature of social locations; and how they address the postmodern issues regarding the notion of a bounded, unified self. The seminar covers contrasting perspectives on these issues. Readings are structured so as to ground psychological theory and research within interdisciplinary analyses of societal processes. The aim of the seminar is to provide theoretical and methodological resources applicable toward conducting feminist research on mind, self and identity with a psychological grain of analysis, grounded in a broad societal frame of interpretation. Instructor's permission. Ms. Falmagne/Offered periodically

**PSYC327 BASIC DEVELOPMENTAL THEORIES/GRADUATE SEMINAR**

Provides a systematic overview of core ideas in the selected theories of development. Covered will be theories of Lamarck, Preyer, J.M. Baldwin, Piaget, Vygotsky, Werner, Kaplan, Gottlieb, Fischer and van Geert. Analyzes theoretical systems from the viewpoint of how these theories relate to the phenomena of development, as well as with empirical research practices. Mr. Valsiner/Offered periodically

**PSYC331 MULTIVARIATE ANALYSIS/GRADUATE SEMINAR**

Introduces students to multivariate statistics. The models, assumptions, data screening and interpretation of results for factor analysis, multiple regression and multidimensional scaling, for example, are discussed. Staff/Offered periodically

**PSYC332 COGNITION AND DEVELOPMENT/GRADUATE SEMINAR**

An hour-long discussion about various issues in cognitive development studied from a broad range of perspectives. Topics in past years have included: pretense, nature of symbolic thinking, situated cognition approaches to literacy, socio-constructivist theory of language development, the relation between emotions and the self, and activity theory. Each semester is divided into reading major works in development (e.g., Vygotsky, Dewey) and recent experimental papers closely related to each participant's research. This is a yearlong course for which students receive a one semester of credit. Ms. Wiser, Ms. Budwig/Offered periodically

**PSYC334 CRITICAL PSYCHOLOGY FORUM/GRADUATE SEMINAR**

This is an interdisciplinary forum for bringing issues of contemporary social, personality, evolutionary and cultural psychology to be actively discussed by all graduate students. The aim is to acquaint the participants with several opposing views and to demonstrate how such views can lead to new knowledge. Different topics are discussed in different years. Staff/Offered periodically

**PSYC336 COGNITIVE AND AFFECTIVE BEHAVIOR/GRADUATE SEMINAR**

This course is firmly research-based but goes beyond the recounting of research to examine the specific pertinence of different findings for understanding normal and atypical child development. Cognitive development research is a major area of developmental psychology that investigates the acquisition of knowledge in children. It describes and explains systematic changes in children's knowledge about the physical and the social worlds and in their use of cultural tools (e.g., language, writing, and number). Cognition involves a large array of mental processes-perceiving objects and events, problem-solving, reasoning, creativity, using language, conceptualizing, remembering, classifying, symbolizing, understanding others' intentions, and many others. Ms. Wiser/Offered periodically

**PSYC337 EMERGING ADULTHOOD: DEVELOPMENT FROM LATE TEENS THROUGH TWENTIES/GRADUATE SEMINAR**

This course focuses on development from ages 18 to 29, a period of the life course now known as "emerging adulthood." Topics explored include family relationships, friendships, love and sexuality, school and work transitions, religious beliefs, and views of what it means to become an adult. The course is international in scope, highlighting differences between industrialized and developing countries. Perspectives from psychology, sociology and anthropology are considered. Mr. Arnett/Offered periodically

**PSYC347 LANGUAGE AND HUMAN DEVELOPMENT/GRADUATE SEMINAR**

Introduces students to central debates concerning the relationship between language, thought and culture. Drawing upon readings from a variety of disciplines including psychology, anthropology and linguistics, we consider language and context, communicative practices, and how developmental psychologists have thought about the interface between language, thought and culture. Students have the opportunity to relate ongoing interests to themes from the seminar. Ms. Budwig/Offered periodically

**PSYC351 METHODOLOGIES OF SYSTEMIC ANALYSES OF SINGLE CASES/GRADUATE SEMINAR**

The goal is to provide graduate students with knowledge and practical experience of analysis of individual cases (both for research and practice). The seminar covers both qualitative and quantitative approaches to single-case analysis. Mr. Valsiner, Mr. Laird/Offered periodically

**PSYC357 SPECIAL TOPICS IN PEACE PSYCHOLOGY/GRADUATE SEMINAR**

The UN General Assembly has asked both nations and people to begin creating a culture of peace for the world's children. How might we go about that challenging task? This course begins by considering the task from the perspectives of anthropology, economics, political science, psychology, and sociology. It then takes a critical look at each of the eight bases for a culture of peace proposed by the UN. Finally it examines 12 specific ways or paths that may be used to create these bases and a culture of peace. We shall pay particular attention to the relevant psychological literature. Prerequisites: Instructor's permission. Mr. de Rivera/Offered periodically

**PSYC361 NEUROPSYCH:BIO OF BEHAVIOR/GRADUATE SEMINAR**

This course provides a broad overview of neuropsychology for undergraduate and graduate students. The goal of the course is to provide students with knowledge of brain and behavior relationships. Students will learn how the brain governs primary cognitive domains such as memory, attention, executive functions, and intelligence. We will also examine the neuropsychological tests used to evaluate the various cognitive domains, students will become familiar with the format and type of information provided in neuropsychological reports, and we will discuss some of the disorders typically seen in individuals referred for neuropsychological evaluations such as dementias, traumatic brain injury, learning disabilities, ADHD etc. Staff/Offered periodically

**PSYC362 CURRENT PERSPECTIVES IN EVOLUTIONARY AND SOCIAL PSYCHOLOGY/GRADUATE SEMINAR**

Evolutionary theory is both challenged by and contributes to the understanding of social phenomena. The course explores classic topics in social interaction, such as group process, conformity and obedience, interpersonal attraction, emotion, self and identity, and altruism, bringing to bear simultaneously the perspectives of evolutionary psychology and standard social psychology. Mr. Laird/Offered periodically

**PSYC364 SEMINAR: DIVERSITY ISSUES/GRADUATE SEMINAR**

This course examines the sociocultural context of human behavior with a particular focus on issues of diversity in the clinical setting. This course fulfills the Massachusetts State Licensing Board requirement for training in issues of cultural diversity. Mr. Cardemil/Offered every other year.

**PSYC374 COUPLES THERAPY PRACTICUM/GRADUATE SEMINAR**

Students in this practicum will learn how to assess and treat the full spectrum of mildly to severely distressed couples. The treatment approach emphasizes fostering intimacy, closeness and mutual acceptance, while at the same time teaching useful communication and problem-solving skills. We will be treating both married and unmarried couples as long as they are currently living together and are not violent. Depending on the number of students in the practicum, students will either treat couples as part of a two-person team or as the sole therapist. Class time will be devoted to group supervision, discussions of the broader issues of couple therapy and a weekly journal club. Students should expect to see between two and three couples over the course of the one-year practicum, with each course of therapy being approximately 20 to 25 sessions. Students in the practicum will learn about the correlates and predictors of marital distress, how to assess a couple's level of distress and commitment, how to formulate and test therapeutic hypotheses over the course of treatment, and how to conduct a very powerful and effective approach to couple therapy. Students should expect to be proficient and capable of proceeding quite independently by the end of this one year practicum. Mr. Cordova/Offered periodically

**PSYC380 PSYCHOTHERAPY PRACTICUM/GRADUATE CLINICAL PRACTICUM**

Supervised experiences in psychotherapy. Ms. Palm/Offered every semester

**PSYC382 ADVANCED THERAPY PRACTICUM/GRADUATE CLINICAL PRACTICUM**

Ms. Palm/Offered periodically

**PSYC384 CULTURE AND HUMAN DEVELOPMENT**

How do behaviors pertaining to infant attachment, puberty, and romantic love vary from culture to culture? How do views of respect for parental authority, the value of autonomy, and the meaning of being an adult vary from culture to culture? And how do such behaviors and views intersect with psychological conceptions of what is healthy vs. unhealthy, normal vs. abnormal? In the course "Culture and Human Development" (Psych 384), we examine the ways an individual's psychological and social development takes place in cultural context, from infancy to adulthood. Readings include qualitative and quantitative studies of different parts of the life span in diverse cultures (globally and within the United States). While most readings are drawn from psychology, some readings are by anthropologists, legal scholars, and literary authors. Course content has implications for theoretical, research, and applied purposes. The course format is highly interactive, including discussion of readings, class exercises, guest visitors who grew up in different cultures, films, and student presentations. Course Requirements: For clinical psychology Ph.D. students, this course satisfies the "social" APA requirement. For developmental psychology Ph.D. students, it satisfies the developmental graduate seminar requirement. Graduate students from all other programs and departments are welcome. Ms. Jensen/Offered periodically

**PSYC385 CHILD THERAPY PRACTICUM/GRADUATE CLINICAL PRACTICUM**

Ms. Grolnick, Mr. Ciottoni/Offered every other year

**PSYC387 ETHICS IN CLINICAL PSYCHOLOGY/GRADUATE CLINICAL PRACTICUM**

For first-year clinical students. Ms. Goldberg/Offered every year

**PSYC389 CLINICAL WORKSHOP/GRADUATE CLINICAL SEMINAR**

For all clinical students in residence. Clinical Staff/Offered every semester

**PSYC390 PROGRESS IN PSYCHOLOGY/GRADUATE SEMINAR**

This seminar will acquaint advanced graduate students with the most recent theoretical, empirical and methodological thought in the discipline. Staff/Offered periodically

**PSYC391 MASTERS SEMINAR/GRADUATE SEMINAR**

Provides advanced graduate students with a systematic framework for knowledge about professionally relevant accomplishments in their professions: second-year project, M.A. thesis, preparation of manuscripts for publication, build-up of curriculae vitae. Staff/Offered periodically

**PSYC396 WHAT CHILDREN KNOW/CAPSTONE SEMINAR**

Examines the evolution of children's knowledge about the physical world; the biological world; language, number and other symbolic systems; and the social world. How do infants' and children's perceptual and cognitive abilities interact with input from caretakers to advance their knowledge? How do symbolic systems such as language and writing get internalized? Related topics are the evolution of language in the human species, the history of number and writing systems and animal cognition. Prerequisites: PSYC120 or 150. Ms. Wiser/Offered periodically.

**PSYC398 CLINICAL INTERNSHIP**

This course allows graduate students in the clinical psychology training program who are completing their APA approved internship. Permission of the Director of Clinical Training is required. Staff/Offered every semester

**PSYC399 DIRECTED STUDY**

Prerequisite: permission of instructor. Variable credit. Staff/Offered every semester

**SOCIOLOGY****Program Faculty**

Deborah Merrill, Ph.D. - Chair

Parminder Bhachu, Ph.D.

Patricia Ewick, Ph.D.

Bruce London, Ph.D.

Robert Ross, Ph.D.

Shelly Tenenbaum, Ph.D.

**Program Overview**

The American sociologist C. Wright Mills described the perspective of sociology as the "sociological imagination." This point of view enables us to see how individual lives are shaped by larger social forces. Mills argued that we cannot fully understand ourselves without understanding the society in which we live. At Clark, the sociology faculty is committed to developing such an analytic capacity in students.

Through the examination of social processes, such as social stratification, social movements and social change, and through an investigation of diverse social institutions, such as the law, family, medicine and religion, students acquire the conceptual and analytical tools to enhance both their understanding of their own lives and the world in which they live.



One of the questions most frequently asked by students is, "What can I do with a degree in sociology?" Because of the emphasis placed on critical thinking, analytical and communicative skills, and methodological training, students majoring in sociology are well equipped to enter a variety of occupations, as well as professional careers and graduate schools. Sociology majors have gone to law school, medical school, social-work and business school. Others have become marketing analysts, government policy analysts, university administrators and political consultants.

## Undergraduate Requirements

The sociology major consists of 10 courses within the department and a minor, concentration, or a program in the social sciences or closely related field. The 10 departmental courses are to be distributed as follows:

All majors must complete:

- SOC010 Introduction to Sociology
- SOC105 The Social Research Process
- SOC107 Classical Sociological Theory
- SOC200 Class, Status and Power
- SOC105 The Social Research Process and SOC107 Classical Sociological Theory prior to their senior year. SOC107 is a prerequisite for SOC200 Class, Status and Power. Students who complete an equivalent methods course in Psychology, Geography or Government may waive the SOC105 requirement and count this methods course toward their sociology major (i.e., one of 10 courses required for major.)
- Six additional sociology credits, one of which must be a capstone. At least three of these six courses must be at the 200 level. These credits may be fulfilled through the completion of six regular courses or through a combination of course work, internships (maximum of two credits) or directed research. Of the four required courses for a major, three must be taken on campus. Of the 10 total courses for the major, six must be taken on campus. COPACE courses are not counted for Sociology credit. To receive sociology major credit, students must earn a grade of C– or better.

## The Capstone Requirement

Sociology majors must take a capstone seminar. To enroll in a capstone seminar, students must have already completed SOC010 Introduction to Sociology, SOC105 Social Research Process, SOC107 Classical Sociological Theory and all course prerequisites in the subject area of your capstone seminar. The capstone seminar will build upon knowledge gained in previous courses and will include a serious research component. All courses between 270 and 296 are capstone seminars. SOC297 Senior Honors Thesis also fulfills the capstone requirement.

## Honors Program

Selected seniors may wish to complete an honors thesis. This is usually the equivalent of two full courses in sociology. To prepare for the thesis, students will be encouraged to do a directed reading or research in the fall of their senior year. Students who select this option are expected to devote approximately 50 percent of their senior year to major research. Application to the sociology department by those with a 3.2 average in the major must be made by March 1 of the junior year. Only students whose proposal is approved may waive the capstone

seminar requirements. Complete guidelines are in the Sociology Student Handbook which is available in the department office or online.

## Sociology Minor

Requirements for a sociology minor consist of six courses with the following provisions:

Three of our four core courses:

- 1) SOC010 Introduction to Sociology
- 2) SOC105 The Social Research Process
- 3) SOC 107 Classical Sociological Theory
- 4) SOC 200 Class, Status and Power.

Please note that SOC107 is a prerequisite for SOC200. Students who have completed an equivalent methods course are encouraged to take the remaining three core courses. Three additional sociology courses, at least two of which must be at the 200 level. Four of the six courses must be taken on campus. Students must earn a grade of C– or better to receive sociology credit.

## Courses

### COMM050 COMMUNICATION AND CULTURE IN MAIN SOUTH/FIRST-YEAR SEMINAR

See Communication and Culture 050.

### EDUC208 LITERACY ACROSS THE CURRICULUM/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT

See Education 208.

### EDUC260 LITERACY DEVELOPMENT/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT

See Education 260.

### EDUC261 HUMAN DEVELOPMENT AND LEARNING / LECTURE, DISCUSSION

See Education 261.

### EDUC283 WAYS OF KNOWING IN HISTORY AND THE SOCIAL SCIENCES/LECTURE, DISCUSSION, FIELD PLACEMENT

See Education 283.

### EDUC284 WAYS OF KNOWING IN THE HUMANITIES / LECTURE, DISCUSSION, FIELD PLACEMENT

See Education 284.

### EDUC286-A WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES/LECTURE, DISCUSSION, FIELD PLACEMENT - ELEMENTARY

See Education 286-A.

### EDUC286-B WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES/LECTURE, DISCUSSIONS, FIELD PLACEMENT - MIDDLE/SECONDARY

See Education 286-B.

### EDUC287-A WAYS OF KNOWING IN MATHEMATICS/LECTURE, DISCUSSION, FIELD PLACEMENT - ELEMENTARY

See Education 287-A.

### EDUC287-B WAYS OF KNOWING IN MATHEMATICS/LECTURE, DISCUSSION, FIELD PLACEMENT

See Education 287-B.

### EDUC304 TEACHING AS RESEARCH SEMINAR I, II

See Education 304.

### ENG021 LITERACY, LEARNING, WRITING/LECTURE, DISCUSSION

See English 021.

### ENG209 WRITING OUT LOUD/WORKSHOP

See English 209.

**PHYS040 SCIENCE AND SOCIETY/FIRST-YEAR SEMINAR**

See Physics 040.

**SOC010 INTRODUCTION TO SOCIOLOGY/VARIABLE FORMAT**

Overview of sociology, its areas of study, methods of inquiry and concepts for the analysis of society. Fulfills introductory course required for majors. Ms. Ewick, Ms. Tenenbaum, Mr. London/Offered every semester

**SOC090 NO SWEAT! THE NEW SWEATSHOPS IN GLOBAL CONTEXT**

Low wages, long hours, and dangerous conditions characterized work in turn of the century sweatshops - especially the garment industry. These conditions are back, characterizing up to half the US apparel industry and are typical in the global rag trade as well. This seminar will explore the new sweatshops, and what we can do about the problem. The course will develop student skills in using the Internet as a serious research tool to supplement but not replace libraries. Fulfills the Comparative Perspective requirement. Mr. Ross/Offered periodically

**SOC095 WHY MARRY?/FIRST YEAR SEMINAR**

Why do Americans continue to marry given the high rates of divorce (approximately 43%) and the increased acceptance and occurrence of alternatives to marriage, such as cohabitation and single parenting? This class looks at why people marry and expect to marry at such high rates (approximately 90%), including economic reasons, the belief that married households are the place to raise children, and an expectation that marriage will last forever. Marriage as a social institution, and not just a personal arrangement, is highlighted. The course will consist of reading and discussion with some lecture. There will be a class project where students, working in groups, will survey the Clark community on their attitudes towards marriage and analyze the results. This is a First Year Seminar. Ms. Merrill/offered periodically.

**SOC105 SOCIAL RESEARCH PROCESS/LECTURE, DISCUSSION**

General introduction to logic, techniques and ethics of social-science inquiry. Reviews qualitative and quantitative methods, as well as sampling. Fulfills the methods requirement for majors. Not open to seniors. Ms. Ewick, Ms. Merrill, Staff/Offered every semester

**SOC110 SOCIOLOGY OF GENDER/LECTURE, DISCUSSION**

Focusing on sociological, historical, psychological and economic dimensions of gender, this course examines the ways in which the social system and its institutions create, maintain and reproduce gender. The course emphasizes the processes through which gender categories are constructed and represented, as well as the consequences of these categories for the lives of individuals. Ms. Ewick/Offered periodically

**SOC125 CITIES AND SUBURBS/VARIABLE FORMAT**

Introduces urban sociology. Examines the historical structure and development of American metropolitan areas and community power, with special attention to changing functions of cities and suburbs. Examines different ways of life in cities and suburbs. Globalization and international comparative perspectives are also examined. Mr. Ross/Offered every year

**SOC130 GENOCIDE**

Provides students with a comparative perspective that highlights theory and concrete examples of genocide. The course will begin with an overview of structural, cultural, psychological and political conditions that make the occurrence of and experience of genocidal behavior more probable. After surveying sociological theories of genocide, we will explore four cases of genocide that took place over the course of

centuries and across several continents. The course will end with discussion of the prevention of genocide. Ms. Tenenbaum/Offered every year

**SOC135 MEDIA AND SOCIETY/LECTURE, DISCUSSION**

Analyzes the development, history and structure of media of mass communication. Examines research on a variety of contemporary issues in the sociology of media. A variety of theoretical and methodological approaches is presented to questions of analysis and effects of communication media. Staff/Offered occasionally

**SOC136 (FORMERLY SOC 273) EFFECTS OF MASS MEDIA [FORMERLY SOC 273]**

See Sociology 136.

**SOC137 RACE AND ETHNICITY ACROSS BORDERS: COMPARING THE LOCAL AND GLOBAL**

Using a comparative framework, this seminar will examine the concepts of race and ethnicity in local, national and global locations. Particular emphasis will be on race and ethnicity in changing cultural and political contexts in an ever-changing globally connected world. For example, how have the events of September 11 in New York determined and constructed racial and ethnic identities? What are social, cultural and political dynamics that shape racial identities and ethnic stereotypes? Why do derogatory racial labels get attached to people? How do ethnic groups get defined in volatile contexts? Students will read autobiographies and biographies to explore how formative racial and ethnic experiences have shaped their own lives and identities and those of others who have documented their lives in books and on film. What can we learn from these racial and ethnic imaginations that can help us theorize race and ethnicity across borders through sophisticated and sensitive theoretical frameworks. Fulfills the Comparative Perspective requirement. Ms. Bhachu

**SOC160 GLOBAL CULTURES AND IDENTITIES/LECTURE, DISCUSSION**

Explores the impact of local, national and international forces in the formation of cultural identities at a time of rapid social changes. Focuses on contemporary cultures to examine local and national identities as they are globally determined. Emphasizes the elastic and the plastic nature of cultures and the importance of time, place and space to understand the emergence of new culturally diverse settings. Examines the nature of social and cultural change in local, national and global economic and political spaces. Ms. Bhachu/Offered every year

**SOC175 THE SOCIOLOGY OF FAMILIES/LECTURE, DISCUSSION**

Examines the assumed decline of "the" American family and the recent changes in family formations. Also considers challenges to the new family, such as dual-career couples and the resulting division of labor in the home as well as divorce. Working-class, African-American and homeless families are also discussed. Ms. Merrill/Offered every year

**SOC180 AGING AND SOCIETY/LECTURE, DISCUSSION**

This course challenges stereotypes about the elderly and aging as a "problem" for society. Focuses on the diversity of the aged and the experience of aging in the United States. Ms. Merrill/Offered every other year

**SOC200 CLASS, STATUS AND POWER/VARIABLE FORMAT**

Analyzes the nature, dynamics and historical development of social inequality. The economic and political power of the upper class, social mobility, the process of deindustrialization, feminization of poverty and the intersection of race and class are studied. Required for the major. SOC107 is a prerequisite. Mr. London, Mr. Ross, Ms. Tenenbaum/Offered every semester



**SOC203 AMERICAN JEWISH LIFE/VARIABLE FORMAT**

Introduction to the social scientific study of American Jewry. Topics include immigration, economic mobility, intermarriage, Jewish feminism, American Judaism, ethnic identity, anti-Semitism and political behavior. Throughout the semester, comparisons between Jews and other groups are highlighted. Ms. Tenenbaum/Offered every other year

**SOC218 WORK AND PLAY IN THE CITY: THEN AND NOW**

See History 218.

**SOC225 RELIGION AND SOCIETY/LECTURE, DISCUSSION**

This course introduces students to key theoretical and empirical works in the sociology of religion. We apply major theoretical perspectives to contemporary religious life. We ask how individuals find meaning in and are shaped by their experiences of religion. Special consideration is given to how gender, race and ethnicity influence religious life. We explore the rise of new religious movements (historical and contemporary), the relationship between religion and modernity, and elements of fundamentalism and conservatism in Christianity and Judaism. Staff/Offered periodically

**SOC231 MEANING, POLITICS AND DIFFERENCE: SOCIOLOGY OF CULTURE/LECTURE, DISCUSSION**

This course applies several of the principal concepts, frameworks and theoretical approaches currently used in the sociology of culture and samples some of the major contemporary research in the field. The goal is to offer a range of approaches by which sociologists can examine and understand cultural forms and cultural phenomena. Readings focus on relations between culture and history, culture and power, culture and politics, culture and resistance, and culture and local environments. The course is intended to engage contemporary debates in culture, rather than to offer a conclusive and synthetic definition of the field. SOC010 or COMM101 is a prerequisite. Open to juniors and seniors only. Staff/Offered every other year

**SOC232 POPULATION, ENVIRONMENT AND DEVELOPMENT/VARIABLE FORMAT**

Studies the statistical description and analysis of human populations. Focuses on relationships between and among social, cultural, political and economic forces; and population structures, processes and characteristics. Such demographic factors contribute to the understanding of social issues, such as the aging of the population, the changing status of women, rapid world urbanization and Third World economic problems. Mr. London/Offered every year

**SOC237 ASIANS AND JEWS IN THE UNITED STATES/LECTURE, DISCUSSION**

See English 237.

**SOC241 SOCIOLOGY OF MEDICINE/LECTURE, DISCUSSION**

Examines the role of health-care professionals in the United States, as well as health and illness as social phenomena. The course also addresses problems in the health-care system at the national level and reviews potential solutions to the mounting crisis in the provision of health services. Not open to first year students. Ms. Merrill/Offered every year

**SOC242 HUMAN RIGHTS AND TRANSITIONAL JUSTICE/LECTURE, DISCUSSION**

This course will explore the development of international law in relation to violations of human rights from the signing of the Hague and Geneva conventions to the present. The course will explore what approaches have been tried, the advantages and drawbacks of each, and the recurring dilemma faced by transitional regimes of whether to "trade justice for truth." The principal examples will be: the International Military Tribunals at Nuremberg and Tokyo; the inves-

tigative commissions appointed by South Africa, Argentina and Chile; the International Criminal Tribunals for the former Yugoslavia and Rwanda; and the ongoing debate over the founding of the International Criminal Court. Staff/Offered periodically

**SOC243 POLITICAL SOCIOLOGY/VARIABLE FORMAT**

Examines various dimensions of political power in societies. Considers various definitions of power and the state. Empirical studies focus on political communities and political inequalities; states, bureaucracies and "pressure"; political culture and communication; and revolution. Emphasizes historical, comparative and international dimensions. Mr. Gordy, Mr. Ross/Offered periodically

**SOC244 THE COMMUNITY/LECTURE, DISCUSSION**

An analysis of one of the most enduring ideas at the heart of the discipline of sociology: the idea of community. How do we define "community"? What is the meaning of community for individuals and groups? How has the nature of community changed over time? And what are the central concepts, issues, theories and methods used by sociologists in the writing of community studies? Mr. London/Offered periodically

**SOC250 CULTURE, CONSUMPTION AND CLASS IN LOCAL AND GLOBAL CONTEXTS/LECTURE, DISCUSSION**

Focuses on political, cultural and ethnic aspects of consumption. Emphasizes how people and groups define themselves through symbols in consumer products. Examines the interplay between economic markets and cultural identities, local and global processes, and consumption and cultural strategies to discover the consumer subcultures. Students conduct a small ethnographic project on consumer pattern, product or culture. Ms. Bhachu/Offered every other year

**SOC252 RACE AND AMERICAN SOCIETY/LECTURE, DISCUSSION**

Focuses on the political, economic and social lives of Native Americans, Latinos, African-Americans, Asian-Americans and whites. Topics include social construction of race, racism, the civil-rights movement, gender, class, popular culture and public policies. A central assumption of this course is that we must turn to the historical experience to understand contemporary race relations. Ms. Tenenbaum/Offered every year

**SOC255 THE CREATION OF NATIONALISM, NATIONALIST CULTURES AND SYMBOLS/LECTURE, DISCUSSION**

At a time of rapid global changes and globalization, nationalisms and nationalist cultures have grown dramatically. This course explores how nationalist identities and resistance are determined by culture and the cultural symbols, such as key consumer commodities, cultural symbols, gender, language and dress codes. Ms. Bhachu/Offered every other year

**SOC258 WOMEN IN JEWISH CULTURE/LECTURE, DISCUSSION**

Seeks to uncover the experiences of Jewish women and uses gender analysis to enrich our understanding of Jewish life. Raises questions about the image and status of women in texts, rituals and communal practices from the biblical period to the present. Ms. Tenenbaum/Offered every other year

**SOC260 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL/LECTURE, DISCUSSION**

Examines immigrants and the cultures they create through movement and settlement and through the many borders they cross. Also covered is the diasporas immigrants create through the travel they undertake both voluntarily and in some cases through forced migration. How do borders, journeys, migration shape the identities of individuals, groups, cultural objects and commodities? Ms. Bhachu/Offered every year

**SOC262 LAW AND SOCIETY/LECTURE, DISCUSSION**

Examines the relationship between law and other aspects of social life. Relying on case studies and other empirical studies of the legal system, particular attention is paid to the following topics: law and justice, crime and social control, law and social change, civil justice and legality and everyday life. Ms. Ewick/Offered every year

**SOC263 DEVIANCE/VARIABLE FORMAT**

Why are some behaviors, differences and people stigmatized and considered deviant while others are not? This course examines theories of social deviance that offer answers to this and related questions such as: How and why are behaviors designated as deviant? How do individuals enter a deviant lifestyle? And how do various social statuses, such as sex, affect the incidence, type and responses to deviant acts? Ms. Ewick/Offered periodically

**SOC264 ORGANIZED CRIME AND CORRUPTION**

This course is designed to familiarize students with recent research on organized crime, with an emphasis on the following factors: Comparative historical accounts of organized crime movements, particularly in Sicily, the Americas and Russia; the social roles of organized crime in interaction with other social institutions; the role of organized crime and corruption in interaction with political institutions. Students should be able to develop a perspective on how organized crime and corruption develop and function, how they relate to institutions in the wider society, and how political and law-enforcement intuitions have attempted to respond. SOC262 or SOC263 is a prerequisite. Staff/Offered every two years

**SOC265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE/ VARIABLE FORMAT**

Modern American movements (labor, civil rights, new left, global justice) are used as examples for discussion of social movements. Problems of framing, resources, and identity are analyzed. The form of the course depends on the number of students registering. Mr. Ross/Offered periodically

**SOC267 POVERTY AND SOCIAL POLICY IN COMPARATIVE PERSPECTIVE**

The course compares the U.S., Canadian and (Western) European social policy regimes. It includes an introduction to how poverty is defined in the US and internationally, and the strengths and weaknesses of these measurements and shows students how to use online sources to find local and national data about poverty and low income. Social insurance and income supports, labor relations and health policies are among the topics explored in the relevance for the working poor. Mr. Ross/Offered periodically

**SOC272 PUNISHMENT, POLITICS AND CULTURE**

In the past thirty years the purposes and practices of punishment in the U.S. have changed dramatically, becoming increasingly harsh (death penalty, three strikes, supermax prisons) and retributive (abandonment of all rehabilitation efforts) and far reaching (over 2 million Americans are in prison or jail). These changes represent a near-complete and rapid reversal of fairly long term trends in penal justice in the U.S. This course will explore what factors - political, cultural, demographic, technological - changed crime from a remote possibility in the minds of most Americans to a defining concern of Americans? Why, despite similar experiences of modernity, are European democracies characterized by such different cultures of control? In what ways, do our penal practices reflect and reinforce major social divisions - of

race, ethnicity, gender and class? What are the affects of such a transformation on the economy, the family, community, schools, and our ideals of justice? In short, what do our penal practices reveal about late twentieth century American culture, social structure and politics? (Pre-requisites: Soc 262 or Soc 263) Permission Only Ms. Ewick

**SOC274 HATRED**

See Sociology 233.

**SOC275 FAMILY ISSUES IN AN AGING SOCIETY/ SEMINAR**

Examines how the aging of the American population has affected family life for both older and younger generations. Emphasizes a life-course perspective and gives attention to the impact of mid-life family events on later life relationships. Topics include family caregiving, divorce and remarriage, widowhood, grandparenthood, and intergenerational relationships. Prerequisites: SOC175 or SOC180. Ms. Merrill/Offered every other year

**SOC276 DISCOVERING PHYSICS/LECTURE, LABORATORY**

See Physics 020.

**SOC285 SOCIAL POLICY, IMMIGRATION AND POVERTY/SEMINAR**

Analyzes who is poor and how government policy affects the poor. Compares the U.S. experience to Western Europe, and addresses the question of whether there is a permanent underclass of poor people. Additional issues of policy and analysis vary by year. Prerequisite: SOC200 or instructor's permission. Mr. Ross/ Offered every other year

**SOC288 GLOBALIZATION: FASHION AND FOUL PLAY/ SEMINAR**

Examines processes of economic and social development. Focuses on changes in the structure of industrial regions of the advanced capitalist countries and changes in the structure of developing and more peripheral regions. The conceptual framework is that of a global capitalist system undergoing significant transformation in the development of labor and capital. Prerequisites: SOC200 or instructor's permission. Mr. Ross/Offered periodically

**SOC294 GLOBAL ETHNOGRAPHIES: ETHNOGRAPHERS IN THE MAKING FOR THE 21ST CENTURY/SEMINAR**

Focuses on emergent ethnographic concerns, which attempt to capture fluid cultural processes and connections as they unfold in late-1990's global arenas. Deals with multiple-sited ethnography of movement, displacement, replacement and the global traffic in culture. It also analyzes traditional ethnographies and ethnographic methods of the founding pioneers, including the work of the famous Clark University ethnographer Franz Boas. Prerequisites: SOC160 or instructor's permission. Ms. Bhachu/Offered every year

**SOC296 INTERNSHIP SEMINAR: GENDER**

Focus changes each year depending on faculty interest. Foci include gender, community organizing and aging. Prerequisites: Soc 110 or Soc 175 or WS110 or instructor's permission. Ms. Tenenbaum/Offered periodically



## VISUAL AND PERFORMING ARTS

Matthew Malsky, Ph.D. – *Chair*

Visual and Performing Arts is composed of individual academic programs in art history, studio art, music, screen studies and theater arts. Whether students prefer to study the history, criticism, philosophy and theory of the arts or to engage in the creative activity of studio work, composition or performance, there are courses, concentrations, minors, specializations and majors available. A major in a given area can be the core for a preprofessional program; or the student may cross traditional disciplinary lines—by double majoring, for instance, or by designing a major or combined major that includes two or more areas of study. Students, with a program director, may develop a four- or five-course sequence as a minor or an area of specialization. Majors and nonmajors are welcome to attend the many art exhibitions, film presentations, and musical, theatrical and dance performances.

Because art reflects the trend of thought and the impact of events of its time, it relates to many other areas of study—history, philosophy and psychology. The study of the arts thus can enhance one's understanding and appreciation of other disciplines. For students interested in the arts, humanities, or social and natural sciences, the study of art can provide both majors and nonmajors with an especially enriching liberal-arts education. Courses in art offer opportunities to develop critical skills, acquire resources for visual thinking and communication, and engage in personal creative expression. For both future art scholars and professionals, Clark's art programs provide a solid foundation that will serve them well in their graduate studies or careers.

The Visual and Performing Arts Department is part of the Higgins School of Humanities.

## ART HISTORY

### Program Faculty

Kristina Wilson, Ph.D. – *Director*

John Garton, Ph.D.

Rhys Townsend, Ph.D.

### Program Overview

The art-history major focuses on the visual arts and the social, cultural and historical context in which art is created. Majors may take courses in Ancient, Renaissance and Baroque, and Modern art history or other areas. For those considering teaching, museum and gallery work, arts conservation or arts management, the major is designed to meet the student's needs and may include an internship at an appropriate institution.

### Undergraduate Requirements

#### The Art History Major

A total of 14 courses are required, 10 of which are art-history courses.

##### 1. Art History Courses

- ARTH010 From the Stone Age to Our Age (or equivalent course or superior advanced-placement performance)
- ARTH150 Methodology and Historiography
- Eight courses in the following areas: Ancient, Renaissance/Baroque, Non-Western and Modern, with not more than two courses in any one area; a total of three must be at the 200 level.

##### 2. Related Courses

- Four courses in visual and performing arts, of which two must be in studio art. These courses must be selected in consultation with the adviser.

### Double and Combined Majors

Because of its interdisciplinary nature, students may wish to double major in art history and another discipline. In such cases, the number of required courses is reduced to 11. Another option is the combined art history-studio art major. Eight art-history courses and three visual and performing arts courses normally serve as the art-history component of a double major or a student-designed major. A combined major, requiring a minimum of eight art-history courses, may be developed in consultation with the studio-art and art-history program advisers.

### Honors Program

Requires the 14 courses for the art-history major, including a directed reading (ARTH299 Sec. 1) in the fall of the senior year and the senior honors thesis (ARTH299 Sec. 8) in the spring. Students wishing to take honors in art history should identify an area of interest, choose an appropriate adviser and apply for eligibility to the art-history faculty before the end of the junior year. See the course description under ARTH299 Sec. 8 Honors in Art History, for details.

### Art History Minor

All courses and seminars in this program are open to nonmajors. Students whose major lies in another discipline may minor in art history. Six courses are required for the art-history minor.

#### Requirements:

- ARTH010 From the Stone Age to Our Age
- Five additional courses, with no more than three in one area of specialization (i.e., Ancient, Renaissance/Baroque, Modern) and at least two at the 200 level.

### Courses

#### ARTH010 FROM THE STONE AGE TO OUR AGE: MONUMENTS AND MASTERPIECES OF WESTERN ART/LECTURE, DISCUSSION

Begins with a reach back in time to the dawn of history 20,000 years ago when the earliest creators in the western world painted powerful images of animals on walls located in the eerie, dank depths of cave interiors. This startling act marked the beginning of communication through visual images. We will move chronologically through history, exploring the major monuments and masterpieces of painting, sculpture and architecture, and the cultures that produced them. By focusing primarily, although not exclusively, on select key monuments—the Pyramids, the Parthenon, the Pantheon—and on the masterpieces of major artists—Raphael, Rembrandt, Renoir, Rothko (among others)—from prehistoric times to our own computer age, we will gain an understanding of visual culture and of the needs and aspirations that are expressed. Mr. Townsend, Ms. Wilson/Offered every semester

#### ARTH105 THE AEGEAN WORLD

An introduction to the architecture, sculpture and painting of Egypt and the Aegean during the Bronze Age. The course covers the Old and New Kingdoms of Egypt, the cultures of the Aegean islands, Crete, and mainland Greece. Examines artistic forms and traditions of each region in order to shed light on the individual religious and social contexts in which they evolved. Highlights the archaeologists whose discoveries have illuminated the history and artifacts of these lands. Field trips to area museums. Mr. Townsend/Offered every other year

**ARTH106 INTRODUCTION TO ARCHAEOLOGY**

Concentrates on the Mediterranean region, tracing the history and methods of archaeology—emphasizing its unique combination of the sciences and the humanities—from its first steps to its technologically advanced state today. Selected case studies will demonstrate how archaeology has illuminated the ancient world. Also examines the newly developed field of underwater archaeology. Mr. Townsend/ Offered every other year

**ARTH109 CLASSICAL MYTH AND THE GREEK**

Investigates selected classical myths and the concept of the “Greek ideal” as expressed in art, both in classical Greece and Rome and in various later periods, including the 20th century. Approaches the myths from the standpoint of origin and significance, changing modes of representation and manipulation for political purposes. The “Greek ideal” is also examined both as it originally developed and as it was conceived in subsequent ages. The course also considers the changing attitudes towards the classical world and the significance of the classical tradition in art and history. Field trips to area museums. Mr. Townsend/ Offered every other year

**ARTH110 ANCIENT GREEK ART**

This intensive survey reviews Greek art from the collapse of the Minoan-Mycenaean world in the 12th-century B.C. to the close of the Hellenistic period in the first-century B.C. Geographically, it reaches from Greece, westward to the Greek cities of South Italy and Sicily and eastward to the Hellenized lands of Asia Minor, Egypt and the Near East. The course discusses the concept of artistic originality and stylistic development, the relationship between art and politics and the contribution of Greek art to the history of the visual arts in the Western world. Field trips to the Worcester Art Museum and the Boston Museum of Fine Arts. Mr. Townsend/ Offered every other year

**ARTH111 ROMAN ART AND ARCHITECTURE/LECTURE, DISCUSSIONS**

See Classics 111.

**ARTH114 ANCIENT CITIES AND SANCTUARIES**

Introduces the great urban and religious centers of the ancient world. The course examines the concept of the city as it first evolved in the Near East and as it developed in classical Greece and Rome. The course emphasizes both the design and structure of urban spaces and the factors affecting town planning. Discusses ancient sanctuaries not only as areas of religious worship, but also as centers of cultural activity involving theater, art, athletics and politics. Cities and sanctuaries are viewed in their historical setting as part of the larger civilizations, which nurtured them. Mr. Townsend/ Offered every other year

**ARTH118 ART IN THE AGE OF ALEXANDER THE GREAT/LECTURE**

By his death in 323 B.C., at age 33, Alexander the Great had conquered most of the known world, his empire stretching from Greece to the Indus River Valley of India. In the process, he transformed this region into a polyglot, multicultural mix that has been compared to the global village in which we live today. This course examines the life and times of Alexander and his followers through the record of the material culture they left behind: architecture, sculpture, painting, gold, coins, jewelry and everyday artifacts. It specifically examines how culture is shaped by such material goods and uses an historical perspective to gain insight to the ever-changing profile of our society today. Trips to area museums. Mr. Townsend/ Offered every other year

**ARTH124 ITALIAN ART FROM GIOTTO TO BOTTICELLI/LECTURE, DISCUSSION**

Examines one of the most crucial periods in Western art, the Early Renaissance in Italy. Investigates painting, sculpture and architecture in their cultural and historical contexts from the trecento (1300s) to the late quattrocento (1400s), with a focus on Tuscany and its flourishing capital, Florence. Explores the movement away from Byzantine and Gothic art toward a new, uniquely Italian style emphasizing humanity, realism and science. Assesses how humanist studies, republican politics, monastic reform and the emergence of a wealthy mercantile class affected artistic style and theory. Considers artists, growing self-awareness as professionals contributing to contemporary intellectual developments and the ideology of genius. Artists highlighted in this course include Giotto, Brunelleschi, Donatello, Ghiberti, Fra Angelico, Piero della Francesca and Botticelli. Field trips to area museums. Staff/ Offered every other year

**ARTH125 ART IN THE AGE OF MICHELANGELO/ LECTURE, DISCUSSION**

Focuses on the art of the 1500s in Italy, an era comprising the High Renaissance and Mannerism, perhaps the single most influential period in Western art after classical times. Investigates painting, sculpture and architecture in the major Italian cultural centers of Florence, Rome, Milan, Parma, Mantua and Venice. Considers questions of style, influence, patronage, art theory and scholarly and religious developments. Highlights the work of Michelangelo, including the recently restored Sistine Chapel frescoes, the Medici Tombs, the David and the Pietà. Also considers the work of Leonardo da Vinci, Raphael, Correggio, Giorgione and Titian, and their relationship to Michelangelo and his legacy. Looks at the rise of papal Rome and the building of St. Peter's basilica and the Vatican palaces. Field trips to area museums. Staff/ Offered every other year

**ARTH131 BAROQUE ART IN THE AGE OF BERNINI/ LECTURE, DISCUSSION**

Considers Italian art and architecture from around 1580 to 1680, the age known as the Baroque. An era of astonishing artistic activity, it was marked by lavish patronage by popes, cardinals and princes, centering on the cosmopolitan capital of Rome. This period was characterized by fundamental changes in society, including the birth of the Catholic church as a concept, new and revolutionary scientific discoveries, a new global awareness and the growth of political absolutism. Explores how these developments informed the style, iconography and patronage of art. Highlights Italian artists Caravaggio, Bernini, Borromini and Pietro da Cortona, as well as foreigners working in Italy such as Poussin and Claude Lorrain. Topics considered include the rise of landscape painting, still life and genre painting, as well as the concept of the Baroque unity of the arts. Field trips to area museums. Staff/ Offered every other year

**ARTH140 MODERN ART: 19TH CENTURY/LECTURE, DISCUSSION**

Examines neoclassicism, romanticism, realism and impressionism. Studies the development of landscape painting in England, France, and the United States in relation to the rise of urbanization and industrialization, and the origins of an “avant-garde.” Ms. Wilson/ Offered every other year

**ARTH142 ART AND THE EXPERIENCE OF MODERNITY, 1880-1940/LECTURE, DISCUSSION**

A survey of the major movements in avant-garde art from the late-19th century to World War II in Western Europe and the United States. We will examine how the art of this period—painting, sculpture, collage, photography, architecture—engaged the modern world through strategies as varied as resistance, subversion and open



embrace. The course begins with the generation of neo- and post-impressionist painters, covers the development of abstraction and concludes with the surrealist dreamscape. Ms. Wilson/Offered every other year

**ARTH143 ART FROM 1940 TO 1970:MODERNISM & ITS DISCONTENTS/LECTURE, DISCUSSION**

A survey of the major trends in art between 1940 and 1970, focused primarily, but not exclusively, on the art scene in Europe and the United States. We will begin with the emergence of New York as the center of the international avant-garde and the seat of Abstract Expressionism in the years after World War II. The course will then trace the disintegrating confidence of the mid-20th-century modernist moment, examining such movements as neodadaism, pop art, minimalism, and the land artists of the late 1960s. Ms. Wilson/Offered every other year

**ARTH144 ART SINCE 1970**

A survey of the major trends in art since 1970, focused primarily, but not exclusively, on the art scene in Europe and the United States. We will begin with the art movements of the 1970s that challenged the traditional definition of "a work of art," including conceptualism and body art. The course will continue with the rise of postmodernism and the death (and resurrection) of the author through the expanded field of painting, sculpture, video, and installation art in recent decades. We will study this art in light of contemporary social and political concerns, such as feminism, the pervasiveness of commercial culture, and the increasing globalization of identity. Ms. Wilson/Offered every other year

**ARTH150 THE ART OF ART HISTORY:HISTORY & METHODS/SEMINAR**

This seminar is intended primarily for art history majors. It explores the major critical questions that art historians have asked, and attempted to answer, in the past 150 years. Through selected readings and the close examination of works of art, we will discuss the major theories that have shaped the way art historians look at art, write about art, and talk about art. Our topics will include formalism, social art history, biography, semiotics and iconography, feminism and gender studies, race and global identity, and the role of the museum. Ms. Wilson/Offered every other year

**ARTH158 ART AND THE CITY OF WORCESTER/FIRST YEAR SEMINAR**

This class is an introduction to art history, using the rich trove of art collections within the city of Worcester as primary objects of study. Each week we will be immersed in the art of a specific time and place, reading relevant articles and then examining, in person, actual examples of art from the period. Over the course of the semester, we will visit the collections of the Worcester Art Museum, the American Antiquarian Society, and the Higgins Armory Museum, and will also study several examples of public art in the city. By the end of the semester, students will have gained a foundation in art history and will also have come to know the City of Worcester in greater depth. This course does not replace the lecture ARTH 010: From the Stone Age to Our Age. Fulfills the Aesthetic Perspective requirement.

**ARTH159 LATIN-AMERICAN ART/LECTURE, DISCUSSION**

Surveys the art and architecture of Latin America, ranging from Argentina to the United States, from the pre-Columbian period to the present. Begins with an exploration of the art of Mesoamerica and the Andes before the arrival of the Europeans, including the Maya, Olmecs, Aztecs and Inca. Explores the cultural convergence that resulted from the conquest in the 16th century, focusing on the role of

indigenous artists and traditions in the formation of early Colonial culture. Traces the development of the colonial arts, considering the role of civil and religious patronage, the rise of the art guilds, the international makeup of European cultures in the Americas and the relationship with the arts of Spain and Portugal. Considers the rise of nationalism in the 17th and 18th centuries and its effect on the arts, including the revival of Amerindian forms by the independence movement in regions that would later become Peru and Mexico. Explores the development of the arts from independence from Spain and Portugal in the early 19th century to the present, including a consideration of Chicano art in the United States. Field trips to area museums. Staff/Offered periodically

**ARTH160 THE ARTS OF ASIA/LECTURE, DISCUSSION**

The 21st century has been called the "Asian Century" in anticipation of the leading role that Asia will play in the world's economic, political and cultural life. This course journeys through the history of the art and architecture of the most important civilizations in the Far East: China, Japan and Korea. Begins with China, whose arts tradition developed in isolation for over a millennium before exerting a profound influence on the nascent visual-arts cultures of Japan and Korea about 2,000 years ago. Explores how those two regions developed unique art forms that were repeatedly still affected by new waves of influence from China. Considers ancient bronzes, scroll and screen painting, religious sculpture, ceramics and decorative arts and architecture. Examines the function of these arts in society; the relationship between art and the great religions and philosophies of Daoism, Shinto, Confucianism and Buddhism (especially Chan or Zen Buddhism); the diversity of art patronage (emperors, warlords, monks and literati); and the relationship of art to the past. Field trips to area museums. Staff/Offered periodically

**ARTH161 THE ARTS OF ISLAM/LECTURE, DISCUSSION**

Islamic peoples make up one third of the world's population, historically embracing regions as diverse as Spain, North Africa, the Middle East, India and Central Asia. Their culture is dynamic and diverse, and intimately related to neighboring civilizations in Europe, the Far East and Sub-Saharan Africa. Examines the art and architecture of Islam from the lifetime of the Prophet Muhammad (d. 632) to the present. Considers the development of the mosque and madrasa (religious college), miniature and mural painting, ceramics, ivory, metalwork, textiles and other arts. Explores the religious disinclination toward figural art and the growth of the "arabesque," or geometrical/floral patterns. Also examines the flourishing figural tradition that existed in nonreligious art. Monuments considered include the Alhambra in Granada, the Great Mosque of Damascus, the Dome of the Rock in Jerusalem and the Taj Mahal. Field trips to area museums. Staff/Offered every other year

**ARTH211 SEEING & HEARING IN THE RENAISSANCE**

See Music 211.

**ARTH215 THE TEMPLE BUILDERS: ARCHITECTURE IN ANCIENT GREECE**

Traces the evolution of monumental architecture in Greece from its origins in the Geometric period through its development in Archaic, Classical and Hellenistic times. Emphasizes the integration of craftsmanship, or *techne*, with elements of design in the Doric, Ionic and Corinthian orders. Discusses the relationship between architect and patron, the social role of architecture and its political impact, as well as the problems of modern investigation and reconstruction of ancient buildings. Mr. Townsend/Offered periodically

**ARTH216 ARCHITECTURE AND DEMOCRACY/SEMINAR**

This seminar will explore the relationship between the built environment and civic ideology in ancient Athens and 20th-century America. "Built environment" refers to structures in, through and around which a society functions and includes both private and public buildings and spaces. "Civic ideology" means ideas that embody the collective beliefs and aspirations of the citizen body. In particular we will be interested in the relationship between the individual citizen and the state in ancient Athens and 20th-century United States and the means by which architecture acts to construct that relationship. Area field trips. Mr. Townsend/Offered every other year

**ARTH230 CARAVAGGIO/SEMINAR**

Focuses on the work of one of the best known artists of any period, the painter Michelangelo Merisi or Caravaggio (1573-1610). Although he died a young man in 1610, he is often considered the most important painter of the 17th century. Explores Caravaggio's intense naturalism and the controversy it caused, his sense of drama and supernatural light and the role of his personality in works of art. Surveys his life in Rome, Naples, Malta and Sicily, considering his religious paintings, genre scenes and still lifes. Considers the contradictory aspects of his character: his sexual ambivalence, his criminal violence and his intense spiritual devotion. Explores his artistic legacy in Italy and abroad with a strong emphasis on Artemisia Gentileschi. Readings include art-historical scholarship, history and original documents from the period. Field trips to area museums. Staff/Offered periodically

**ARTH232 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR**

A critical assessment of the notion of hybrid art, focusing on the period of European discovery of non-European civilizations from the 16th through 18th centuries. Explores the impact of European Renaissance and Baroque art in a global context, including the Far East, Southeast Asia, India and the Americas. This age of global encounter involved intimate contact between the widest spectrum of peoples, representing different races and religions, as well as political, social, economic and cultural systems. Considers the role of missionaries, merchants and colonial powers in bringing European art to the non-European world, and the differing degrees of contact/conquest that existed between them. Primary focus is on the reaction of non-European cultures such as the Chinese and Nahua (Aztecs) to the new styles and iconographies from Europe, and the perpetuation of indigenous symbols, styles and ideas in the art produced after contact with Europeans. Evaluates the new art styles that were developed as the cultures began to merge, and questions whether transcendent styles or aesthetics emerge from the prolonged interaction of cultures. Staff/Offered periodically

**ARTH233 TROPICAL BAROQUE: THE ARTS OF COLONIAL LATIN AMERICA/SEMINAR**

Tropical Baroque will be the first seminar devoted to the Renaissance and Baroque art and architecture of Colonial Latin America (1492-1820), an arts tradition of greater richness and diversity than many in Europe itself. It will include not only Spanish America, including New Spain (Mexico, New Mexico and California), the Andean region, the Caribbean, Brazil and the Southern Cone (Argentina, Chile, Paraguay and Uruguay), but also the former Portuguese territories in Brazil. The course will consider architecture, including palaces and villas, cathedrals and churches, and fortresses and public spaces. It will also examine painting and sculpture, both religious and secular, as well as the so-

called minor arts such as furniture, metalwork, textiles and ceramics, which have received much attention in recent scholarship. The field of Colonial Latin-American art is enjoying a renaissance in recent years. The people and societies who produced and used this art and architecture came from the widest spectrum of backgrounds and walks of life. They included Amerindians, Africans, Asians and mestizos, as well as Europeans from places as varied as Spain, Italy and Bohemia. Mirroring the incredible diversity of Latin America's natural landscapes, colonial art and architecture blended styles and techniques from Aztec, Inca and Guarani civilizations with those from Europe, North Africa and the Far East to produce works of unprecedented creativity and originality. Staff/Offered periodically

**ARTH232 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR**

A critical assessment of the notion of hybrid art, focusing on the period of European discovery of non-European civilizations from the 16th through 18th centuries. Explores the impact of European Renaissance and Baroque art in a global context, including the Far East, Southeast Asia, India and the Americas. This age of global encounter involved intimate contact between the widest spectrum of peoples, representing different races and religions, as well as political, social, economic and cultural systems. Considers the role of missionaries, merchants and colonial powers in bringing European art to the non-European world, and the differing degrees of contact/conquest that existed between them. Primary focus is on the reaction of non-European cultures such as the Chinese and Nahua (Aztecs) to the new styles and iconographies from Europe, and the perpetuation of indigenous symbols, styles and ideas in the art produced after contact with Europeans. Evaluates the new art styles that were developed as the cultures began to merge, and questions whether transcendent styles or aesthetics emerge from the prolonged interaction of cultures. Staff/Offered periodically

**ARTH239 SPECIAL TOPICS: RENAISSANCE AND BAROQUE ART/SEMINAR**

Introduces specific problems in Renaissance and Baroque art and focuses on student research, oral presentation and writing skills. Qualified students from other disciplines are welcome. Fall 2008 topic: Leonardo da Vinci. Leonardo da Vinci is often regarded as the Renaissance epitome of the "universal man." This seminar will help students reach a deeper understanding of Leonardo's achievements and working methods as an engineer, anatomist, architect, and artist. As our own age moves towards narrower specialization, the myth of Leonardo looms large as an unreachable ideal of "genius." How relevant is Leonardo, and how might one unite humanistic and artistic thinking with the latest advances in science and engineering? What methods did Leonardo use to cultivate and express his intellect? We will examine various writings about Leonardo in an effort to develop a critical understanding of biography and its tropes. Students will learn fundamental methods of art historical analysis while engaging in their own attempts to 'decode' the works of the master as well as more recent art that engages with science and technology. The course will interweave historical study and modern applications. In the process, each student will be encouraged to find ways to make Leonardo's example relevant to his or her own intellectual development. Staff/Offered periodically

**ARTH243 DESIGN IN THE 20TH CENTURY: ARTS & CRAFTS TO IKEA**

A survey of modern design in the Western hemisphere, including furniture, textiles, appliances, logos and graphic design, and architecture. Throughout the 20th century, modernists have used design to promote



various reformist agendas - reform of working conditions for the industrial laborer, reform for the lifestyles of individual consumers, and reform of the values held by society at large. This course examines the objects and buildings that were designed to be the vehicles of social change, and analyzes their aesthetics as well as their ideological agendas. The course begins with the radical Arts & Crafts movement in Britain and the United States, and then covers International Style architecture and Bauhaus design in the 1920s, biomorphic and atomic-age design in the mid-20th century, the design of appliances and automobiles in the postwar period, and postmodernism in the late-20th century. The course concludes with an analysis of our own contemporary, design-obsessed society, investigating the populist agenda of such enormous commercial empires as Target and Ikea. Prereq: A lecture class in modernist art strongly recommended. Ms. Wilson/Offered every other year

#### **ARTH245 URBAN ART & SOCIETY IN JAZZ AGE NEW YORK/SEMINAR**

In the 1920s and early 1930s, New York City was home to (or the inspiration of) some of the nation's most innovative visual, literary and cinematic works. In this interdisciplinary seminar, we will investigate skyscraper architecture, paintings of city life, advertising photography, *The Great Gatsby*, art-deco furnishings, the Harlem Renaissance, and flapper movies. Through a mixture of secondary literature and a wide range of primary sources, we will explore broader themes such as the changing boundaries between "low" and "high" culture and the construction of an urban American identity as inflected through race, gender and class. Ms. Wilson/Offered periodically

#### **ARTH248 GENDER AND REPRESENTATION/SEMINAR**

An exploration of the manifold ways gender affects the production and reception of art. The course will consider the role of gender in art from three perspectives: 1) how gender affects the artist's sense of self; 2) how gender affects pictorial representation; and 3) how gender impacts the way one views a work of art. The course will focus primarily on late-19th-, 20th-, and 21st-century art, with individual classes devoted to selected artists or thematic issues. Ms. Wilson/Offered periodically

#### **ARTH249 SPECIAL TOPICS: MODERN ART/SEMINAR**

Introduces specific topics in the study of modern art. Research and writing intensive. Qualified students from other disciplines are welcome. Ms. Wilson/Offered periodically

#### **ARTH297 HONORS IN ART HISTORY: SENIOR YEAR**

Qualified students who take Honors in Art History should identify an area of interest, select an appropriate adviser and apply for eligibility to the art-history faculty before the end of the junior year. The honors thesis is a yearlong project, for which the student will take 299.1 Directed Reading or 299.2 Directed Research, in the fall of the senior year and 299.8 Honors in Art History, in the spring semester. A second reader, chosen by the student and the adviser, will participate in the final evaluation. Credit is given for course work completed, even if a student is not recommended for honors. Staff/Offered every year

#### **ARTH298 INTERNSHIP**

#### **ARTH299 DIRECTED STUDY**

## **MUSIC**

### **Program Faculty**

Matthew Malsky, Ph.D. – *Director*

John Aylward, Ph.D.

Benjamin Korstvedt, Ph.D.

### **Part-Time Faculty**

Richard Cain, M.Mus.

Mark Berger, Ph.D.

Sarah Caissie Provost, M.Mus

Kallin Johnson, M.Mus.

Sima Kustanovich, M.Mus.

### **Affiliate Faculty**

James Allard,

Donald Boothman, B.A.

Paul S. Jr. Buono, M.Mus.

Stephanie Busby, M.Mus.

Jonathan Clark, M.Mus.

Deborah Cole,

Michael C. Connors,

Joseph W. D'Angelo,

Joseph Halko,

Tracy Kraus, M.Mus.

Jan Muller-Szeraws, M.Mus.

Paul Surapine, B.Mus.

Douglas Weeks, M.Mus.

### **Emeriti Faculty**

Gerald Castonguay, Ph.D.

Wesley Fuller, M.Mus.

Hartmut Kaiser, Ph.D.

### **Program Overview**

The program offers both a major and a minor, as well as courses and activities for the nonmajor. Courses are designed to teach students to listen to music intelligently, develop musical perception, master basic skills of music and apply them creatively, and acquaint students with representative works from various periods of music history. The study of music can open new perspectives on many aspects of culture and society and the program stresses the advantages of combining professional musical development with the humanistic breadth offered by a strong liberal education.

Courses are open to majors and nonmajors, and assignments are designed to suit the different goals and backgrounds of the students in each category.

## **Undergraduate Requirements**

### **The Music Major**

#### **A. Core requirements, taken by all majors (3 courses):**

MUSC100 Studying Music Historically and Critically

MUSC121 Music Theory I

MUSC141 Computers and Music

## **B. The Concentrations (7 additional courses):**

### **(1) Performance (admittance to this concentration requires approval of the MUSC180 instructor)**

#### **Intermediate level**

4 or 6 semesters MUSC180

MUSC122 Music Theory II

1 Music History course (from MUSC101, 102, 104)

1 or 2 additional music course

#### **Upper-level**

MUSC290 Capstone project (half recital with a complementary paper)

### **(2) Music History and Criticism**

#### **Intermediate level**

3 Music History courses (MUSC101, 102, 104)

MUSC122 Music Theory II

1 Music Theory/Composition course (from MUSC128, 220, 223, 224) or

Music Technology course (from MUSC142, 160, 200)

MUSC210 Seminar in Music History and Criticism

#### **Upper-level**

MUSC290 Capstone project

(or, with prior approval, an additional MUSC210 may serve as the Capstone)

### **(3) Music Theory/Composition**

#### **Intermediate level**

MUSC122 Music Theory II

3 Music Theory/Composition courses (from MUSC128, 220, 223, 224)

1 Music History course (from MUSC101, 102, 104)

1 Music Technology course (from MUSC142, 160, 200)

#### **Upper-level**

MUSC290 Capstone project

(or, with prior approval, an additional MUSC220 may serve as the Capstone)

### **(4) Music Technology**

#### **Intermediate level**

MUSC142 Recording Practice and Audio Art

2 Music Technology courses

1 Music History course (from MUSC101, 102, 104)

1 Music Theory/Composition course (from MUSC122, 220, 224)

1 additional music course

#### **Upper-level**

MUSC200 New Media Seminar (with prior approval, an additional MUSC200 may serve as the Capstone)

or MUSC270 Independent Study in Computer Music.

## **C. Additional Requirements:**

1 non-music V&PA course pertinent to the student's interests

2 semesters in a music ensemble (MUSC170, 171, 172, 173, 174, 175)

Passing the Keyboard Skills Exam or two semesters of Keyboard Skills Lab (I and II)

Passing the Aural Skills Exam or two semesters of Aural Skills Lab (I and II)

Note on Music 180. Students in non-Performance concentrations (Music History and Criticism, Music Theory/Composition, Music Technology) are allowed to enroll in up to four semesters of MUSC180 (Private Lessons for credit). If so, such will be in addition to, rather than in fulfillment of, the above-stated requirements.

## **Honors Program**

The intention to pursue an honors degree must be declared before the start of the junior year and requires approval of the full-time music faculty. Approval of MUSC180 instructor is also required for honors in performance.

(1) Honors in Performance is possible with:

a Junior Honors Recitals (half program)

2 semesters of MUSC280 Honors Recital in the senior year

a Senior Honors Recital (full program) with complementary paper

(2) Honors are possible in any of the other tracks with:

(a) two additional music courses relevant to the student's interests, and

(b) an Honors Capstone project to be determined in consultation with the student's Music Advisor.

## **Music Minor**

### **A. Music Minors (other than Jazz)**

#### **1. Core requirements, taken by all minors (3 courses):**

MUSC100 Studying Music Historically and Critically

MUSC121 Music Theory I

MUSC141 Computers and Music

#### **2. Minor Concentrations (3 additional courses each):**

##### **(a) Minor in Performance**

4 semester of MUSC180 (Private Lessons for credit; note that acceptance to the minor in music

performance requires approval of Music 180 instructor and full-time music faculty) 1 additional music course

##### **(b) Minor in History/Criticism**

3 Music History courses (from MUSC101, 102, 104, 210)

##### **(c) Minor in Theory/Composition**

MUSC122 Theory II

2 Music Theory/Composition courses (from MUSC128, 220, 223, 224)

##### **(d) Minor in Music Technology**

MUSC142 (Computer Music II)

MUSC160/220 Soundtracks

MUSC200 New Media Seminar

### **B. Minor in Jazz Studies**

MUSC100 or 104

MUSC121 Music Theory I

MUSC141 Computers and Music

MUSC151 Jazz History

1 pertinent course in 20th-century American History and/or Communications and Culture

a minimum of 2 semesters of Music 180 on a jazz instrument (note: an independent study in Jazz

Theory/Composition may be substituted for one of these semesters)

2 semesters participation in the Jazz Workshop or Combo



## Courses

### **GERM205 THE TOTAL WORK OF ART AND CULTURAL CRITICISM FROM WAGNER TO THE PRESENT/SEMINAR**

See German 205.

### **MUSC010 INTRODUCTION TO MUSIC/LECTURE, DISCUSSION**

Designed for the nonmajor, the course expands the concept of the musical experience and develops discriminating listeners. The course includes an introduction to principles of rhythm, pitch, timbre (and their notations); the principles of structure; the aesthetics of music; specific forms including fugue, sonata form, variations; and selected historical styles. Staff/Offered every year

### **MUSC011 MUSIC AS CULTURE/LECTURE, DISCUSSION**

Students study and listen to the differences and likenesses in music from a wide variety of cultures and consider the ways in which music, ranging from classical art music to music for work and communal celebration, functions within a selected group of world cultures. Includes guest performers of ethnic music. Staff/Offered periodically.

### **MUSC012 POP MUSIC IN THE USA/LECTURE, DISCUSSION**

Beginning with what is (arguably) the start of the popular in American music, this course will examine Tin Pan Alley, Blues, Country, R&B, Swing, early Rock 'n Roll, Motown, the Folk Revival, the British Invasion, Psychedelic Rock, Progressive Rock, Punk, Disco and Heavy Metal, as well as some more recent music. The course will focus on understanding the stylistic and historical practices of this wide range of popular music. The principle perspective of the class will address popular music as an audible text as an artifact of, and contributor to, popular music culture. No previous musical experience (such as the ability to read or play music) is assumed. However, a willingness to listen to all of this music carefully and to engage a variety of theoretical approaches is presumed. Staff/Offered periodically

### **MUSC014 INTRODUCTION TO WORLD MUSIC**

This largely nontechnical survey course seeks to foster a meaningful understanding and appreciation of diverse musical experiences from around the globe. Our explorations will alternate between two distinctive approaches: (1) studying the musical cultures of specific geographical areas and (2) discussing broader topics of comparison between cultures. The ultimate aim is for each student to attain a more holistic, global perspective from which to savor each experience. Assignments will help students to listen more actively and also examine how their own basic assumptions about music - what they take for granted - may comprise just one corner of a larger and richer "world" of musical possibilities. Staff/Offered periodically.

### **MUSC016 POPULAR MUSIC IN 20TH-CENTURY AMERICAN CULTURE**

Music was one of the most vibrant and meaningful elements of 20th-century American culture. This seminar will cover major forms of American popular music, notably Blues, Jazz, the American popular song from Foster through Cole Porter to Dylan, rock and country music. Along with extensive listening work, the course will focus on exploring ways in which music was taken up by the cultural discussion of the times. Also at issue will be how music functioned as a social practice that negotiated basic tensions inherent to American society, especially those around race and the changing ways in which music has functioned within the culture industry. This course will be concerned primarily with discussion and explication of readings and music. Readings will be drawn from a range of music criticism and

other writings about music. In addition, students will be involved in a series of projects including short papers, small-group studies and in-class presentations. Mr. Korstvedt/Offered periodically

### **MUSC100 STUDYING MUSIC HISTORICALLY AND CRITICALLY**

This course is designed to introduce music majors and minors to the historical and critical study of music. The course is required for all music majors and minors and is a prerequisite for other more specialized music history courses. The course surveys major style periods of Western music (Renaissance, Baroque, Classical, Romantic, Modern). Along the way, you will develop the knowledge base and the methodological tool-kit needed for more advanced coursework in music. We will study major works, that are representative of these style periods, and get to know and understand them through listening, analysis, criticism and contextual history. Over the course of the semester you will encounter and try out some of the major musicological approaches ranging from contextual cultural history, listening as analysis, critical interpretation, and music history as detective work. There is no formal prerequisite, but since the course is designed for students who anticipate majoring or minoring in music it is expected that students enrolling in the course will have some musical background and basic music-reading skills. Mr. Korstvedt/Offered every year

### **MUSC101 BACH AND BEFORE: STUDIES IN MUSIC BEFORE 1750/ LECTURE, DISCUSSION**

An exploration of European music from the Middle Ages through the Baroque period or from the 10th century AD to ca. 1750. This grand slice of music history—more than seven centuries—encompasses a fascinating variety of music: Gregorian Chant, Medieval polyphony, the Renaissance Mass and Motet, the birth of opera, the rise of instrumental genres, and the culminating achievements of the High Baroque. Through a mix of listening, reading, discussion and various written assignments, the course explores how music evolved and participated in the many major cultural, historical and social transitions between the Middle Ages and the Age of Absolutism. Several final weeks of the semester are devoted to the greatest musical figure of the mid-18th century, Johann Sebastian Bach. Previous musical experience is helpful, but not required. Mr. Korstvedt/Offered periodically

### **MUSC102 MUSIC OF THE CLASSICAL AND ROMANTIC PERIODS/ LECTURE, DISCUSSION**

This course explores European music from the mid-18th century through the end of the 19th century. This era was in many ways a high point in the history of musical art and many of the greatest and most beloved composers were active during this time, including Haydn, Mozart, Beethoven, Schubert, Berlioz, Chopin, Verdi, Wagner, Brahms and Mahler. Through a mix of listening, reading, discussion and various written assignments, students will develop an understanding of representative works by these composers, build a sense of the social and cultural contexts in which they worked, as well as sharpen their aesthetic appreciation of this music. Previous musical experience is helpful, but not required. Mr. Korstvedt/Offered every year

### **MUSC103 20TH-CENTURY MUSICAL EXPLORATIONS/LECTURE, DISCUSSION**

Explores the abandonment of functional tonality by many (though not all) Western concert composers after 1900 and the resultant explosion of new musical techniques and systems. Focuses on the remarkable rejections and explorations that characterize much of Western art music since 1945. Prerequisites: None beyond an adventurous ear. Mr. McGinn and Mr. Malsky/Offered periodically

**MUSC104 MUSIC AND MODERNISM IN SOCIETY, 1885-1945/ LECTURE, DISCUSSION**

This course is an exploration of the role and the fate of classical music in modern culture between 1885 and 1945. It is not a comprehensive survey; rather, the course is a guided journey to and from some of the high points—and low points—of ‘serious’ music in this era. We will plunge into the often extreme aesthetic experience of 20th-century music. We will get to know, appreciate and understand (and love!) works by a number of the major composers of the era. We will explore crucial issues of music and cultural politics, especially in the context of war and 20th-century totalitarianism. We will also focus on issues of audience, ‘high’ and ‘low’ art, and cultural politics raised by musical modernism. The course is designed to serve the need of music majors and minors and especially those of interested nonmajors. We will, of course, deal very directly with music, but the intention is to do so in ways that do not exclude those who have little or no formal training in music. The essential prerequisites are a willingness to approach the music we address with open ears and mind and a desire to grapple with ideas and art. Mr. Korstvedt/Offered periodically

**MUSC110 RUDIMENTS OF MUSIC/LECTURE**

Requires no previous musical training. Students learn to understand, write and create using the basic elements of Western pitch and rhythm. Skills gained enable students to pursue private vocal or instrumental instruction or further study in theory and composition. Staff/Offered periodically

**MUSC121 THEORY I: TONALITY 1/LECTURE**

Explores the system of tonal music commonly employed by composers of the 18th and early-19th centuries, as well as by composers of popular music today. This study, incorporating exercises, composition, analysis and performance, also examines the way students listen to music in general, thus leading to a deeper understanding of the musical process. Mr. McGinn, Mr. Malsky/Offered every year

**MUSC122 THEORY II: TONALITY 2/LECTURE**

Extends the study of Western tonality to encompass more advanced techniques such as chromaticism and modulation. Culminates with late-19th-century chromaticism, which reveals both the extraordinary possibilities and ultimately the limitations of using the tonal system as an organizing force in music. Prerequisite: MUSC121. Mr. McGinn, Mr. Malsky/Offered every year

**MUSC125 ACOUSTICS**

Musical acoustics is an interdisciplinary study of the physical, perceptual, and cognitive character of musical sound—a unique blend of science and art. Topics include the elementary physics of vibrating systems, waves and wave motion; the human ear and its response; time- and frequency-domain analysis of sound; room acoustics and reverberation; and the acoustics of musical instruments—the human voice, strings, winds, and percussion. The emphasis will be on the practical aspects of acoustics in music making. The class meets as a lecture with a mandatory weekly hands-on laboratory. Mr. Malsky

**MUSC128 MUSIC AND WORDS**

It has been said that music is a potent non-verbal “language” in its own right; that it frequently takes over where words leave off. Despite, or perhaps because of this special relationship, words and music have found their way together throughout history and across all cultures of the world. Far from attempting an exhaustive survey, this course will examine carefully selected word-music collaborations that are especially eye- and ear-catching, that offer enlightening points of comparison,

and that raise intriguing questions about the nature of words versus the nature of music. Analytic papers, small group discussions and classroom presentations will help students become more adept at listening actively, comparatively, critically, and creatively as they study the relative merits and contributions of text and music in considered examples. Prerequisites: None, though some basic skill in reading music is an asset. Fulfills the Aesthetic Perspective requirement.

**MUSC141 COMPUTERS AND MUSIC/LECTURE, DISCUSSION**

The computer is, arguably, the most distinctively contemporary musical instrument. A project-based and historically grounded introduction to the computer as a musical tool, this course covers a variety of technical topics such as multitrack digital recording and mixing, the fundamentals of sound synthesis, and digital signal processing. A series of cumulative technical assignments through the semester lead to a large composition project. A variety of musical repertoires will be studied through recordings and readings. Mr. Malsky/Offered every year

**MUSC142 RECORDING PRACTICE AND AUDIO ART/SEMINAR**

Many following Brian Eno have observed that the recording studio is the musical “instrument” most characteristic of our time. The majority of the music we encounter is produced using its facilities, production techniques and aesthetics. In the first half of the semester, we’ll work with the industry standard digital audio workstation (DAW) ProTools to make a polished multitrack recording. This part of the class will introduce you to sound recording as a process and an art, and will also cover the supporting science and technology that makes it possible. In the second unit, you will be more composer than engineer. You will create a short composition in a “sound collage” style called *musique concrète* beginning with recordings of voices and software for processing and editing. Prerequisite MUSC141 or permission of instructor. Mr. Malsky/Offered every year

**MUSC150 JAZZ THEORY/LECTURE, TUTORIAL**

Includes a study of the rhythmic/harmonic/melodic structures of jazz, the scalar basis of improvisation, and voicing practice as it pertains to scoring for small and large ensembles Prerequisite: MUSC121 or permission of Program Director. Staff/Offered periodically by permission

**MUSC151 JAZZ HISTORY/LECTURE, TUTORIAL**

Studies the evolution of jazz style from its 19th-century beginnings to the present, including African roots, minstrels, ragtime, Dixieland, swing, bop, progressive, cool, free-form and third-stream. Requires a research paper and a final exam. Staff/Offered every year

**MUSC160 SOUNDTRACKS/LECTURE**

How do sounds and music work in conjunction with (and against) moving images? This class will address this question, both on a practical, do-it-yourself level with a variety of exercises and projects, as well as through a critical and analytical approach with screenings, readings and discussion. The course is organized into three sections. First, we will examine the elements of narrative sound and introduce the practice of audiovisual analysis. In the middle section of the class, we will focus on post-production techniques. This constellation of practices found in classic narrative films through contemporary ones (that is, the body of films with which most of us are most familiar) will be the subject of scrutiny and emulation through a series of exercises dealing with dialogue, music, and sound effects. Third, we will look at a variety of historical conventions: sound and music in silent and transitional/early sound films as well as experimental cinema and concentrate on live performance of music and sound effects to accompany silent



film. Prerequisite MUSC121 or 141 or ARTS 167 or SCRN107.

Mr. Malsky/offered periodically

#### **MUSC170 CLARK CONCERT CHOIR/REHEARSAL, PERFORMANCE**

A chorus of 30 to 40 voices, the choir presents two major concerts each year on the Clark campus as well as in off-campus appearances.

Ms. FitzGibbon/Offered every semester

#### **MUSC171 CLARK CHAMBER CHORUS/REHEARSAL, PERFORMANCE**

This is a small, specialized singing group chosen from the larger Clark Concert Choir by the conductor. Admission is by audition.

Ms. FitzGibbon/Offered every semester

#### **MUSC172 CONCERT BAND/REHEARSAL, PERFORMANCE**

Concert Band consists of 25 members performing two major concerts a year. Mr. Cain/Offered every semester

#### **MUSC173 CHAMBER MUSIC ENSEMBLES/REHEARSAL, PERFORMANCE**

The number of small ensembles is determined by the performing talent in a given semester. Standing ensembles include string, woodwind, mixed brass, jazz vocal. Admission is by audition. Staff/Offered every semester

#### **MUSC174 JAZZ WORKSHOP AND COMBO/REHEARSAL, PERFORMANCE**

Includes ensemble performance practice with weekly rehearsals throughout the year. An audition is required. Staff/Offered every semester

#### **MUSC175 CLARK SINFONIA/REHEARSAL, PERFORMANCE**

The Clark Sinfonia is a string orchestra, which expands to include wind players for some repertoire. It offers two major concerts a year.

Mr. Sulski/Offered every semester

#### **MUSC180 PRIVATE INSTRUCTION IN INSTRUMENTS AND VOICE**

Private Instruction in Instruments and Voice Areas offered include: piano, jazz piano, voice, jazz vocal, clarinet, saxophone, flute, classical guitar, jazz guitar, violin, viola French horn, trumpet, bassoon, trombone and low brass, cello, percussion, string bass, and conducting. In areas not currently offered at Clark, the music program will find a qualified instructor. Music 180 is covered by tuition and receives course credit (two semesters of MUSC180 is one full course unit).

Students enrolled in MUSC180 meet weekly with an instructor, participate in two music workshops, and fulfill a concert attendance requirement. Only declared music majors and minors are eligible to take MUSC180. For further information contact the music office.

Staff/Offered every semester

#### **MUSC200 AUDIO CULTURE**

In this class, we will explore the conditions and practices of technologically mediated listening both contemporary and historical in everyday experience. The power of music in everyday life is widely recognized-it influences mood and creates scenes, routines and occasions. As reflected in social theory from Plato to Adorno, music has a profound influence on character, social structure and action. This course will consider how music is a constitutive feature of human agency and communication. Drawing together concepts from ethnomusicology, communications, psychology, sociology and sociolinguistics, we will study music's active role in the construction of social life and highlight the aesthetic dimension of social order and organization in modern societies. Prerequisite MUSC141, SCRN207, ARTS209 or permission. Mr. Malsky/Offered periodically

#### **MUSC205 THE TOTAL WORK OF ART AND CULTURAL CRITICISM FROM WAGNER TO THE PRESENT/SEMINAR**

See German 205.

#### **MUSC210 SEMINAR IN MUSIC HISTORY AND CRITICISM**

The Music History Seminar takes up specific topics and themes in music history that open onto larger cultural contexts and interdisciplinary lines of inquiry. The seminar is based on active discussion and student research with a depth and a focus not possible in a survey course, and will develop the student's critical skills, as well as the ability to write and talk about music in meaningful ways. Seminar topics change each year. Recent topics have included "Music and Culture in Vienna, 1870-1914," "Richard Wagner: Music, Drama, and Meanings," and "Beethoven, Schubert and the Transformation of Music, 1800-1830." The course welcomes music majors and minors, as well as interested students from other disciplines. The seminar may be taken more than once for credit. MUSC102 and/or MUSC104 are recommended, but not required. Mr. Korstvedt/Offered every year

#### **MUSC211 SEEING & HEARING IN THE RENAISSANCE**

This seminar investigates how art and music were seen and heard in early modern Europe, and treats this exploration as a way to discover how these art forms entered into the cultural discussions of the time. We begin from the idea that people within a given culture share experiences, frames of reference, and modes of thinking and feeling that influence how they perceive and interpret artworks. Our focus, therefore, is not the creation of art, the traditional focus of music and art criticism, but rather the perception and reception of art, as we treat the aesthetic experience as a topic in its own right and as an avenue of new historical understanding. The seminar concentrates on the sixteenth and seventeenth centuries, an era in which Europe reached several fundamental turning points that revolutionized Western culture, the most important of which included the revival and creative appropriation of Classical art and thought, the explosive appearance of printed media (which directly impacted our subject areas by means of engravings and printed music), and the enormous ramifications of the Protestant Reformation and the Catholic Counter-Reformation. All of three of the developments directly affected art and music, and, perhaps more importantly, both of these arts became mainsprings by which these developments participated in the cultural discussion of the time. Mr. Korstvedt & Ms. Lepage/Offered periodically.

#### **MUSC220 THEORY/COMPOSITION SEMINAR**

Rotating topics include composition, film music (Soundtracks), musical analysis, orchestration and contemporary performance practice. Prerequisites: MUSC121, 122, 223, 224. Mr. McGinn, Mr. Malsky/Offered every year

#### **MUSC223 THEORY III: COUNTERPOINT/LECTURE, TUTORIAL, LAB**

With a special focus on the definitive tonal counterpoint of Johann Sebastian Bach, this course studies contrapuntal styles and procedures used by composers throughout the development of Western art music as models for independent creative work. Prerequisites: MUSC121, 122. Mr. McGinn, Mr. Malsky/Offered every year

#### **MUSC224 THEORY IV: 20TH-CENTURY PRACTICE/ LECTURE, TUTORIAL**

Analyzes compositional techniques of major 20th-century composers and uses them as a basis for composition and analysis assignments. Prerequisite: MUSC223 or instructor permission. Mr. Malsky, Mr. McGinn/Offered every year

#### **MUSC230 SENIOR TUTORIAL IN MUSIC HISTORY**

Develops work (e.g., a paper, composition or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. Korstvedt/Offered every semester

#### **MUSC240 SENIOR TUTORIAL IN COMPOSITION**

Develops work (e.g., a paper, composition or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. McGinn/Offered every semester

#### **MUSC250 TUTORIAL IN JAZZ COMPOSITION**

Student writes original scores for performance by a workshop ensemble. Prerequisite: MUSC151 and permission of program director. Staff/Offered periodically

#### **MUSC260 SENIOR TUTORIAL IN THEORY**

Student develops work (e.g., a paper, composition or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. McGinn, Mr. Malsky/Offered every semester

#### **MUSC280 PRIVATE INSTRUCTION IN INSTRUMENTS AND VOICE (HONORS LEVEL)**

Areas offered: same as MUSC180 above. Students enroll in MUSC280 for the final two semesters of the honors track, and a fall recital is required as the culminating project for those two semesters. Prerequisites: Four semesters of MUSC180. Staff/Offered every semester

#### **MUSC290 CAPSTONE PROJECT**

#### **MUSC297 HONORS**

#### **MUSC298 INTERNSHIP**

#### **MUSC299 PRIVATE INSTRUCTION IN INSTRUMENTS AND VOICE**

See Music 180.

### **SCREEN STUDIES**

#### **Program Faculty**

Stephanie F. Larrieux, Ph.D. - *Director*

Marcia Butzel, Ph.D.

#### **Adjunct Faculty**

Marvin D'Lugo, Ph.D.

Matthew Malsky, Ph.D.

#### **Part-Time Faculty**

Kirk Jalbert, M.F.A.

Khary Jones, M.F.A.

Fred Simon, B.S.

#### **Visiting Faculty**

Dana Benelli, Ph.D.

#### **Program Overview**

Clark offers one of the few undergraduate programs in the nation that specializes in screen studies, which deals with arts and artifacts of the moving two-dimensional image, usually combined with sound. It is concerned, in other words, with the study of film, television, video and evolving forms of digital visual media. The program offers both a major and a minor and stresses the importance of a liberal-arts background, for the screen arts touch upon and are affected by all sectors of contemporary culture and society. Screen studies provides a core of basic and advanced knowledge of the screen arts and media while encouraging students to explore diverse connections and influences, ranging from the visual arts, drama, literature and aesthetics to sociology, psychology, history and economics.

Nonmajors take screen-studies courses to acquire knowledge that relates to their interests in other disciplines, to gain a better understanding of the roles film and television play in their everyday lives or

to understand the importance of the screen media as cultural and artistic forms. Those considering careers in the screen arts or related areas usually major in screen studies. In addition to being of special benefit for those planning graduate study or a career in the communications fields, the major also may be of interest to those seeking a liberal-arts education that speaks directly to questions of contemporary life, culture and the arts. Students interested in film and video production may take the program's sequence of production courses and gain production experience through professional internships.

#### **Undergraduate Requirements**

Students majoring in screen studies enroll primarily in courses on the history, theory and criticism of film, television, and other forms of motion picture media. The major consists of 12 credits—with a minimum of 9 credits in screen studies. For a course to provide credit toward the major, a letter grade of C or higher must be achieved.

##### ***Three courses are required without exception:***

SCRN010 Introduction to Screen Arts (to be taken as early as possible)

SCRN107 Introduction to Video Production, or its equivalent

SCRN114 Writing About Film (to be taken after SCRN010 and as early as possible)

##### ***One of three U.S. screen survey courses is required:***

SCRN119 History of U.S. Film Until 1950

SCRN120 History of U.S. Film Since 1950

SCRN122 History of American Broadcasting and Electronic Media

##### ***One of two international screen survey courses is required:***

SCRN121 History of International Cinema until 1960

SCRN124 History of International Cinema since 1960

##### ***One course focusing on a national or regional cinema is required:***

SCRN224 World Cinema and Global Culture

SCRN246 Studies in Spanish Cinema

SCRN248 Studies in Latin-American Cinema

SCRN249 Studies in Hispanic Cinema

SCRN252 Asian Cinemas

SCRN263 Topics in French Cinema

##### ***One course focusing on screen genres is required:***

SCRN123 Factual Film and Television

SCRN130 Film Genre

SCRN131 Film Noir

SCRN230 Images of Youth

##### ***One course focusing on the theoretical nature of screen arts is required:***

SCRN240 Film Authors and Authorship

SCRN231 Film Theory

SCRN261 Critical Perspectives on TV Culture

SCRN284 Film as Narration

SCRN288 Gender and Film

##### ***One course that focuses on creativity relevant to the screen arts is required:***

ARTS120 Introduction to Photography

ARTS121 Intermediate Photography

SCRN108 Screenwriting

SCRN145 Do-It-Yourself Media

SCRN160 Soundtracks



SCRN171 Storytelling through Video Production  
 SCRN208 Digital Filmmaking - Narrative Fiction  
 SCRN214 Social and Cultural Documentary Production  
 TA112 The Creative Actor  
 TA120 Technical Theater  
 TA123 Design for Performance  
 TA125 Theatrical Design Projects  
 TA126 The Physical Theater  
 TA212 Actor as Thinker  
 TA230 Playwriting SCRN

### **One capstone course required**

Either SCRN290 ReViewing Disney or SCRN291 Variable Topics  
 (course topic will change each semester)

Capstone courses require the completion of a major research project.

### **Two elective courses or credits that are relevant to the student's interests in Screen Studies.**

These can be any two Screen Studies courses not already taken as requirements; internships; directed studies; honors thesis; transfer credits in screen fields from other schools that do not duplicate any of the students' courses at Clark ; or any of the following V&PA courses:

ARTH142 Art and the Experience of Modernity  
 ARTH143 Art from 1940 to 1970  
 ARTH144 Art Since 1970  
 ARTH243 Design in the 20th Century  
 ARTH245 Urban Art & Society in Jazz Age New York  
 ARTS120 Introduction to Photography  
 ARTS121 Intermediate Photography  
 ARTS200 Photography Projects  
 ARTS205 Eros and Thanatos  
 ARTS209 Introduction to Interactive Design  
 ARTS250 Photography Studio  
 ARTS254 Graphic Design Studio  
 MUSC010 Introduction to Music  
 MUSC011 Music as Culture  
 MUSC012 Pop Music in the USA  
 MUSC014 World Music  
 MUSC103 Twentieth-Century Music  
 MUSC110 Rudiments of Music  
 MUSC141 Computer Music  
 TA112 The Creative Actor  
 TA120 Technical Theater  
 TA123 Design for Performance  
 TA125 Theatrical Design Projects  
 TA126 The Physical Theater  
 TA127 Analysis of Theater Production  
 TA153 Modern Drama  
 TA205 The Play and its Stages  
 TA206 Languages of Theater  
 TA212 Actor as Thinker  
 TA219 Directing Seminar  
 TA225 Advanced Theatrical Design Projects  
 TA226 Advanced Production Projects  
 TA230 Playwriting

## **Honors Program**

Students with a strong interest and commitment to advanced study in the program and who have completed at least six screen-studies courses with at least a B+ average, may, with the program's approval, elect the honors sequence: one advanced topics capstone course and a one- or two-unit senior thesis. Students are expected to use the honors course to develop an extensive research project on some aspect of film history, criticism or theory selected with their major adviser. Students planning to go on to graduate work in screen studies are encouraged to apply for the honors sequence.

All students interested in the honors sequence must apply to the screen-studies program director in the second semester of the junior year.

## **Screen Studies Minor**

### **Minor Requirements:**

- SCRN010 Introduction to Screen Arts
- SCRN107 Introduction to Video Production
- SCRN114 Writing About Film: Critical Approaches
- One screen history course selected from SCRN119, 120, 121, 122 or 124
- One course on a national cinema such as SCRN224, 246, 248, 249, 252, or 263
- One 200-level elective in screen studies chosen in consultation with a program adviser

## **Courses**

### **SCRN010 INTRODUCTION TO SCREEN ARTS**

Introduction to film and related screen media, with emphasis on critical thought and analysis. The course begins with attention to aspects of filmmaking activities — such as cinematography, editing and sound — then explores more contextual screen areas such as art film traditions, screen genres, auteur theory, gender and representation, etc. Students actively analyze films in detail to foster an understanding of screen styles and meanings. Fulfills prerequisites for advanced screen-studies courses. Staff/Offered every semester

### **SCRN107 INTRODUCTION TO VIDEO PRODUCTION**

An introduction to the skills and technology required for video production. Each student will conceptualize, design, shoot, and edit three video projects (individual and collaborative). The course explores both the art and craft of moving image production; and there is a strong emphasis on the creation of imaginative and personal work. No Prerequisites, open to nonmajors. Mr. Simon/Offered every semester

### **SCRN114 WRITING ABOUT FILM**

Considers a variety of critical methods for the analysis and interpretation of film. The course considers several important kinds of writing about film, including journalistic film criticism and analysis based in film theory. Students actively practice all of these modes of writing to acquire the analytic skills used in upper-level courses. The major critical approaches or methodologies of film studies such as formalist criticism, genre criticism, auteur criticism and forms of ideological criticism are explored in coordination with weekly films.

### **SCRN119 HISTORY OF U.S. FILM UNTIL 1950**

The history of the emergence and entrenchment of the Hollywood studio production system and the consolidation of a style of filmmaking now described as the classical Hollywood cinema. Topics to be

covered include: silent filmmaking; the emergence of the star system, feature-length narrative filmmaking and film genres; the disruption of the coming of sound; the impact of the Depression and two World Wars; and the start of Hollywood's golden era. Staff/Offered every other year

#### **SCRN120 HISTORY OF U.S. FILM SINCE 1950**

The history of post-WWII American cinema is the story of an ongoing series of adjustments to (or developments within the context of) instability in postwar film business: film noir, 3-D, biblical epics, blockbusters, art film influences, "new blood" from TV and film schools, Black filmmaking, revisionist genre films, high-concept filmmaking, etc. Further complicating this process of adjustments, cinema was overlaid onto, and consequently influenced by, the political turmoil within American society in general: the "Red Scare," the Vietnam War, the emergence of a mass counterculture, the antiwar movement, Watergate, Reaganomics, the end of the Cold War and increasingly vocal demands by women and minorities for social equality (and media representation). Staff/Offered every other year

#### **SCRN121 HISTORY OF INTERNATIONAL CINEMA UNTIL 1960**

Broad survey designed to acquaint students with major foreign movements in cinema history. Includes readings on and screenings of examples selected from Italian silent epics, French Impressionism, German Expressionist and Weimar cinema, Soviet montage school, Soviet socialist realism, British documentary school, Nazi cinema, Italian neo-realism, Japanese classical cinema and French New Wave. Ms. Butzel/Offered every year

#### **SCRN108 INTRODUCTION TO SCREENWRITING**

See English 108.

#### **SCRN122 HISTORY OF AMERICAN BROADCASTING AND ELECTRONIC MEDIA**

This course considers how broadcasting and electronic media have been developed over the past century. We will examine the technical achievements of the field as well as its social and aesthetic impacts from early electrical and wireless communication (telephone, radio) to mid-century inventions (television, satellites) and more recent innovations (cable, digital technology). We will sample a wide range of media productions, including early radio and TV shows, documentaries and current media phenomena. Students will do some of their own historical research on broadcasting to supplement the course material. Staff/Offered every other year

#### **SCRN123 FACTUAL FILM AND TELEVISION**

An overview of film and television genres associated with factual and documentary filmmaking. A wide array of documentaries are used to examine sociocultural topics, such as art, gender, modernity and race. Focuses particularly on how certain stylistic means of filmmaking shape our understanding of subject matter and themes. Recent experiments with cinema, such as performativity, surrealism and reenactment — that blur the line between fiction and fact — will also be addressed. Staff/Offered periodically

#### **SCRN124 HISTORY OF INTERNATIONAL CINEMA SINCE 1960**

Considers the proliferation and significance since the 1960s of new cinemas outside Europe, as well as major social, industrial, technological, and cultural changes in Western countries supporting alternatives to Hollywood entertainment. Surveys major developments in contemporary international cinema from the mid-1960s to the present, emphasizing both historical study of contexts and critical interpreta-

tion of individual films and broader film trends. Begins with politically-critical filmmaking in the Soviet bloc countries and in the developing countries of Latin America and Africa. Subsequently, the course explores aesthetic and industry trends in European and Asian cinemas, selected from the New German cinema movement, pan-European "quality" films, the Dogme 95 movement, Parallel Cinema in India, the Hong Kong New Wave, and China's Fifth Generation filmmakers. The significant but problematic concept of national cinema is investigated throughout the course. Prerequisite: SCRN 010 or COMM 101, or Permission. Ms. Butzel/Offered every year.

#### **SCRN130 FILM GENRE**

Devoted to the study of the major storytelling formats into which much narrative filmmaking (especially that of the American cinema) may be categorized. The course considers theoretical perspectives, formal description, historical background and social implications of genres such as the western, gangster film, musical, melodrama, etc., and through this work enables students to engage in and experience the interpretive insights of this critical perspective on the cinema. This course is taught as a variable topic, and may be offered as either an overview of several film genres or as a course concentrating on intensive study of a particular genre. Ms. Butzel and Ms. Larrieux/Offered every other year

#### **SCRN140 FILM AUTHORS AND AUTHORSHIP**

Examines the theory and practice of film authorship through a consideration of works by major American and international film authors. Studies historical development of the idea of film directors as authors in Europe and the United States. Emphasizes the impact of such theories on the study of various American figures, which may include Hawks, Ford, Hitchcock and Coppola, as well as international figures. Also examines the formation of film authorship in emerging cultural contexts, such as women's cinema and new national cinemas. Ms. Butzel/Offered every other year

#### **SCRN168 IMAGE THEORY**

Image Theory is a course designed to dissect and analyze the role images play in the collective life of contemporary society. Within our ever-increasing utilization of modern medias such as photography, film, video, and the internet to transmit image-based information, new relationships have transformed the way we communicate with other people as well as the way we receive, structure and learn new information. How has the image become the predominant method of communicating ideas? How do these images affect the way we experience and remember events? How does this exposure alter our own self-identity? Finally, how have visual artists used these image relationships to create powerful and lasting work? We will use these topics as a launching point to create, employ and analyze image-based communications of our own within these various contexts. Mr. Jalbert/Offered periodically

#### **SCRN145 EXPERIMENTAL VIDEO PRODUCTION**

See Communication and Culture 145.

#### **SCRN160 SOUNDTRACKS/LECTURE**

See Music 160.

#### **SCRN168 IMAGE THEORY**

See Communication and Culture 168.



**SCRN171 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION**

Students will produce one or two “storytelling” videos. While they must create at least one individual work, they may choose to work collaboratively on a second project. There will be a strong emphasis on creating stories that explore experimental and innovative approaches and tell personal stories that transcend and cross traditional video storytelling genres of simple fiction and documentary. Pre-production, production and editing will be done outside of class. During class, students will view and critique their own videos as projects evolve, explore relevant production techniques and view and discuss professional films and videos that emphasize innovative approaches. They will also keep journals chronicling the evolution of their projects. Prerequisites are SCRNI07 and competence in production and editing (a working knowledge of Final Cut Pro editing software is required). Mr. Simon/Offered periodically

**SCRN208 DIGITAL FILMMAKING - NARRATIVE FICTION**

An intermediate production workshop primarily for juniors and seniors, this course uses digital video technology to explore cinematic form and style specifically through the craft of narrative fiction visual storytelling. Students working individually and collaboratively will develop short-form narratives from script to screen using sound and image. Through a series of production exercises and projects, lectures, readings, screenings, in-class critiques, and peer reviews, students will refine their critical and aesthetic sensibilities. Sample topics include lighting, composition, continuity, sound, and editing techniques. This course assumes a competence in production and editing. A working knowledge of Final Cut Pro editing software is required. Time demands are heavy and irregularly distributed. Prerequisites: SCRNI010 and SCRNI107 or SCRNI145. Ms. Larrieux/Offered periodically.

**SCRN214 SOCIAL AND CULTURAL ISSUE DOCUMENTARY**

An advanced workshop in documentary production. Using digital video technology, students will design, produce, and edit three short documentaries on contemporary social or cultural issues. Student films will be viewed and critiqued in class. Critical viewing and class discussions will identify and analyze the elements of effective non-fiction storytelling, and will explore realities and decisions faced by documentary filmmakers, e.g., point of view, objectivity, voice, and the ethical dilemmas often confronted by the documentary filmmaker. To take this course, a student must be proficient in the basic skills of production. Prerequisite: SCRNI107 or ARTS107 or TA107 or COMM107 or permission. Mr. Simon/ Offered every other year

**SCRN215 SCIENCE FICTION FILM: CITY OF THE FUTURE**

Beginning with an historical overview of different theoretical approaches to the study of science fiction film, this course examines the ways in which the genre articulates social questions and experience. Through the examination of cinematic form and style, this course focuses specifically on the array of utopian and dystopian representations of the “imagined city of future” in Hollywood science fiction cinema. Analyzing science-fiction films from the 1950s to the present, this course explores issues including: 1) futuricity and the increased representation of apocalyptic visions of the future; 2) the role of technology in the imagined future; 3) the shifting registers of humanity in the future (cyborgs, aliens, robots, droids, hybrids, etc.); and 4) social stratification, hierarchy, and marginalization of future society in terms of race, class, and gender. Through critical reading,

thinking, and writing, students will gain insight into the cinematic (visual and aural) constitution of the urban landscape in relation to the social construction of the future city in terms of racial, classed, and gendered dynamics. Prerequisites: SCRNI010 or COMM101, and Permission. Ms. Larrieux/Offered periodically.

**SCRN224 WORLD CINEMA AND GLOBAL CULTURE**

A course on contemporary film since the 1960s in an international context. World cinema mediates the social, psychological, political and economic concerns of people experiencing the effects of colonialism, war and globalization. World cinema is also often defined in opposition to Hollywood cinema, in terms of three principal trends: art cinema, Third cinema, and a “new internationalism” (referring to transnational and diaspora themes in films, changing modes of film production, and digital convergence in technology). The course will examine each of these trends as it has evolved over time and also consider the effect of globalization on Hollywood. Readings will be diverse and include film history, interpretations of individual films, cultural theory, and some cultural policy analysis. Ms. Butzel/Offered annually

**SCRN225 NATIONAL CINEMA**

Fall 2008 topic: Japanese Cinema. In some respects the Japanese cinema is much like many other national cinemas; it has a long and distinguished history that has produced many notable artists and masterpieces of world film history. This would be reason enough to study this cinema with enthusiasm. But Film Studies has been especially interested in the Japanese cinema in particular for several other more distinctive aspects of its history. For example, only Japan, among other national cinemas, rivals the American cinema for sustained studio-based output of large numbers of films. But the Japanese cinema, unlike America's, accomplished this feat without reliance on overseas markets (its films were virtually unseen in the West until *Rashomon* was shown at the Venice Film Festival in 1951) and while recognizing and accommodating artists within its industrial production system. More importantly, in the work of directors like Kenji Mizoguchi, Yasujiro Ozu, Akira Kurosawa, and others, the Japanese cinema has generated mainstream narrative cinema that deviates radically from the model of transparent realism developed by Hollywood and imitated widely in global filmmaking. This course will be organized chronologically, in order to survey Japan's rich film history and varied periods of development. But equally, if not more, important will be close formal analysis of notable films and auteur styles emerging within this history. (One consequence of this emphasis will be that only limited attention will be devoted to popular culture topics such as *Godzilla* films, anime, and contemporary horror films.) Staff/Offered periodically

**SCRN230 IMAGES OF YOUTH**

This course examines the American youth film as a genre, one that contains certain images of its intended audience - teenagers - which reveal cultural attitudes toward adolescence as well as teens' fantasies about themselves. In some cases these images are stereotypical or extreme, misrepresenting the diverse range of teens who see these films, but in many instances these films uphold teenagers' ambitions, offering empowering and sympathetic portraits of the growing-up process. The course becomes an exploration of how a particular media industry, in this case Hollywood cinema, represents a certain population through developing, refining and upholding generic conventions in depictions of that population. Staff/ Offered every other year

**SCRN231 FILM THEORY**

This seminar examines a wide range of theories regarding motion picture reception, and to a lesser extent, production. Topics will include classic arguments about the aesthetic purpose of film and the place of authorship in screen texts, as well as more contemporary concerns such as queer theory, cognitivism, and post-structuralism. The course will also take up the anti-theory movement that has arisen in recent years. Staff/Offered every other year

**SCRN252 ASIAN CINEMAS**

How different was/is the Asian cinema from the classical Hollywood cinema, which has dominated the world's commercial filmmaking as a model to be either imitated or resisted? The course addresses the issue of difference "from the outside" by engaging in the study of the history of various Asian film industries; identification of the characteristic storytelling formats of Asian cinema; formal analysis of the stylistic signatures of its master directors (such as Kurosawa, Ozu, Ray, Yimou, Woo); and study of western criticism's discourse on these national cinemas. Staff/Offered periodically

**SCRN246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION**

See Spanish 246.

**SCRN248 STUDIES IN LATIN-AMERICAN CINEMA/ LECTURE, DISCUSSION**

See Spanish 248.

**SCRN249 STUDIES IN HISPANIC CINEMA/LECTURE**

See Spanish 249.

**SCRN261 CRITICAL PERSPECTIVES ON TELEVISION**

Pursues fundamental questions about television through the complex mechanisms of contemporary criticism and popular culture. To understand how television functions, for instance, you must understand certain aspects of its mechanics, economics and politics. To understand what television means to people, we confront a matrix of even more varied human dimensions, which are more difficult to identify. How is television studied? How is meaning created through the audio/visual domain of television? How does that meaning come to be popular? What is at stake in the production and consumption of television? Ms. Larrieux/Offered every other year

**SCRN262 STUDIES IN 19TH-CENTURY BRITISH LITERATURE/SEMINAR**

See English 262.

**SCRN263 STUDIES IN FRENCH CINEMA**

French cinema has been an especially successful European cinema for over a century. It has defined film as an art form and as a major site of national cultural production. Distinctive films can be found in every historical period, from the earliest "cinema of attractions" to today's auteur films and popular genre movies. Of the major world cinemas, French cinema has also been the most successfully nationalist: the French government has supported the industry, critics and policymakers have campaigned against Hollywood dominance, and filmmakers have been active in local and global politics. The focus of the course varies each time it is given. We may examine a particular filmmaker, movement, or arts tradition, a genre or comparison of genres, or a particular theme such as immigration, the representation of history, or sexual explicitness in recent films. Taught in English. Prerequisite: SCRNO10 or permission. Ms. Butzel/Offered every other year

**SCRN284 FILM AS NARRATION**

Explores the relationship between storytelling and cinema, from the perspectives of filmmaking craft, critical analysis, film history, the psychology of the spectator and sociopolitical factors. Students acquire vocabulary and concepts to analyze fictional and factual narratives ranging from early-American shorts to contemporary international features. Some consideration will also be given to television series and to interactive digital media as narrative. Specific topics covered include: narrative and nonnarrative sources of films; literary and filmic versions of the detective story; D.W. Griffith and the development of the integrated narrative film; serials and series, sequels and remakes; "assertive" versus "invisible" modes of narration; oral cultural tradition and film. Prerequisite: SCRNO10 and 114 or permission. Ms. Butzel/Offered every other year

**SCRN288 GENDER AND FILM**

Explores the ways that gender is produced by the "social technologies" of film and video. Examines concepts of sexual difference (masculinity and femininity) and organizing representation, narrative and spectatorship in Hollywood and alternative cinemas, and in some television and video. Readings will be primarily theoretical and critical. Ms. Butzel/Offered every other year

**SCRN290 CAPSTONE COURSE**

"ReViewing Disney: Race, Class, and Gender in the Animated Feature Film" This seminar critically examines the Walt Disney animated feature film through the socially constructed lenses of race, class and gender. In analyzing the social values cultivated and endorsed by Disney and greater American society, this course observes how social perspectives and history have transformed these values over time. The ultimate goal of the course is to address the question, "What is American about Disney?" This course uses theoretical, cultural studies, and industrial historical scholarship to contextualize close readings of select films. Screenings inside and outside of class are required. There is an emphasis on reading and writing in this course. Prerequisite SCRNO10 or COMM 101 and permission. Staff/Offered every year

**SCRN291 CAPSTONE COURSE**

Variable topics. Prerequisite: SCRNO10, and SCRNO114 or permission. Staff/Offered every year

**SCRN298 HISTORY OF U.S. FILM UNTIL 1950**

See Screen Studies 119.

**SCRN299 DIRECTED STUDY****SPAN246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION**

See Spanish 246.

**SPAN248 STUDIES IN LATIN-AMERICAN CINEMA/ LECTURE, DISCUSSION**

See Spanish 248.

**SPAN249 STUDIES IN HISPANIC CINEMA/LECTURE**

See Spanish 249.



## STUDIO ART

### Program Faculty

Elli Crocker, M.F.A. - *Director*

Sarah Buie, M.F.A.

Stephen DiRado, B.F.A.

### Part-Time Faculty

Frank Armstrong, B.J.

Valerie Claff, M.F.A.

Timothy Murdoch, M.F.A.

Deirdre Ni Chonaill, B.Design

Leslie Schomp, M.F.A.

Fred Simon, B.S.

Karen Stein, M.F.A.

Stephanie Grey, M.F.A.

Gregory Thielker, M.F.A.

Marguerite White, M.F.A.

Cynthia Wilson, M.B.A.

### Visiting Faculty

Jennifer Hilton, M.A.

### Schiltkamp Gallery Director

Kirk Jalbert, M.F.A.

### Emeriti Faculty

Donald W. Krueger, M.F.A.

### Program Overview

Studio art courses offer students an opportunity to engage in the study and practice of visual language. The learning of artistic methods and media is embedded in intellectual inquiry and critical analysis, so that the study of studio art serves as a meaningful focus of a liberal-arts education. Art is seen as a means of communicating human experience; therefore students learn to “read” images and to visually represent their own ideas. Areas of specialization within studio art include drawing, painting, graphic design, photography, printmaking, sculpture and video production, as well as interdisciplinary work within the major or between studio art and other academic disciplines. In addition to course offerings, students may participate in internships for credit on or off campus. There are also regular exhibitions of contemporary art on campus, course-related field trips to museums and galleries, and artist lectures. Some additional art courses may be taken through COPACE for credit toward the major.

### Undergraduate Requirements

The major normally consists of 14 courses: 11 studio courses and three art history courses. The western survey art history course (ARTH010) must be one of the three art history courses. ARTS100 and 102 are studio foundations designed to introduce students to the nature of visual language and the creative process while encouraging the development of visual expression. At least one of these courses is required of majors and is strongly recommended for nonmajors as preparation for additional work in studio art. In addition to these foundation courses, a number of other introductory level courses in various media (painting, sculpture, printmaking and graphic design) satisfy the aesthetic perspective requirement. As the aesthetic perspective outlines, “artistic expression and the perception, analysis and evaluation of aesthetic form” in fundamental terms will be the focus of these classes. After exploring various media, students may choose to concentrate in one

area and often seek out particular faculty members for personal mentoring. With the approval of the faculty adviser, credits towards the major may include courses in music, theater arts and screen studies, as well as student initiated nontraditional experiences. If a student chooses to double major, eight studio art courses and two art history courses are required, one of which must be ARTH010.

### Capstone for Majors

Studio art majors will undertake work at an advanced level in at least one medium. Courses that satisfy this level of work are: ARTS 254 Graphic Design Studio, ARTS 258 Printmaking Workshop, ARTS 266 Sculpture Studio, ARTS 200 Photography Projects (also offered through COPACE), ARTS 214 Social and Cultural Issues Documentary (Screen Studies), ARTS 280 Advanced Studio in Painting/ Drawing and/or ARTS 234 Studio Topics. Studio Topics is interdisciplinary (students work in a variety of media) and provides a thematic context for the making of art. The class examines current topics occupying the national imagination as well as timeless themes that artists continue to address. Some individual studio space will be available to senior art majors while enrolled in ARTS 234, 280, and 289.

### Honors Program

Students with a strong commitment to intensive study and departmental approval can elect to undertake an honors project, 289 Senior Thesis, which culminates in an exhibition of work in the Clark University gallery. Entrance into the Senior Thesis class is competitive. Students must submit work completed in an advanced level course for review by a faculty panel at the end of the fall semester and must have a combined GPA of 3.0 in their art classes. Participation in this class is not a guarantee that the student will receive Honors. This decision is made by a committee of faculty after the work is presented and reviewed. The honors project also includes a 5-8 page paper explicating the artistic process and content of the project. Credit is given for course completed even if a project is not recommended for honors.

### Courses

#### ARTS101 IMAGING THE COSMOS: DRAWING THE WORLD FROM MICRO TO MACRO

Using the world as a cabinet of curiosities, we will look closely at natural phenomena at all scales of magnification. For our studies we will use structures and dynamic processes found in microbes, fossils, botanical specimens, human and animal anatomy, wind, water, clouds, storms and stars. We will draw with a combination of simple materials such as pencil, pen and ink, pastel as well as more advanced technologies such as opaque projector, camera, microscope, and the computer. In addition to studying objects, we will also encounter and explore various ways of envisioning the natural world that were used in different eras from Renaissance Wunderkammer to the 19th century passion for naturalist explorations, to new imaging technologies used in weather prediction and space exploration. Study references will include the works by artists studying nature who lived from the Renaissance onward, notably Leonardo, Ernst Haeckel, Karl Blossfeldt, Vija Celmins, Gregory Crewdson, Stephen DiRado as well as scientific illustration of natural phenomena as seen through microscopes, telescopes, and computer imaging. Fulfills the Aesthetic Perspective requirement. Staff/Offered periodically

**ARTS102 VISUAL STUDIES: DRAWING—STRUCTURE AND PROCESS/STUDIO, LECTURE, DISCUSSION**

Addresses the mechanics and expressive potential of drawing. Traditional illusionist drawing techniques will be combined with exercises that facilitate personal expression and subjective response. In exploring the relationship among seeing, thinking and making, the beginning student will acquire fundamental skills in image making and insight into the creative process in general. Each faculty member will bring his/her unique perspective and personal studio practices to bear in the teaching of this course. Fulfills the Aesthetic Perspective.

Ms. Crocker and other faculty/Offered every year

**ARTS107 INTRODUCTION TO VIDEO PRODUCTION**

See Screen Studies 107.

**ARTS120 INTRODUCTION TO PHOTOGRAPHY/STUDIO, LECTURE, DISCUSSION**

Introduction to black-and-white photography emphasizing the zone system and including camera operation, developing, printing and finishing techniques. Students must have a variable-setting 35 mm camera with a built-in or hand-held exposure meter and must provide their own film and paper. Open to nonmajors. Mr. DiRado and Mr. Armstrong/Offered every semester

**ARTS121 INTERMEDIATE PHOTOGRAPHY/STUDIO, LECTURE, DISCUSSION**

Continues the refinement of photographic seeing through darkroom techniques, digital imaging and alternative processes. We will consider a broad spectrum of aesthetic, formal and conceptual issues in the field of fine-art photography, while students will be encouraged to develop a personal vision. Some reading and writing required, as is a field trip. Students will meet weekly for critiques and lectures, concluding the semester with a comprehensive portfolio. Open to nonmajors. Prerequisite: ARTS120 or acceptable portfolio with instructor permission. Mr. DiRado, Staff/Offered every year

**ARTS122 INTRODUCTION TO DIGITAL PHOTOGRAPHY**

With the rapidly advancing digital processes replacing the medium of color photography, the fall session of this course will concentrate on digital capture and through-put to fine art pigment-based ink prints in a studio environment. Basics of shooting digitally and working with the image through Adobe Photoshop will be covered extensively, as well as the integration of other studio disciplines into this process. Mr. Armstrong/Offered every year

**ARTS123 DESIGN FOR PERFORMANCE/STUDIO, TUTORIAL**

See Theater Arts 123.

**ARTS124 INTRODUCTION TO GRAPHIC DESIGN/STUDIO, LECTURE, DISCUSSION**

Introduction to the language, process and potential of graphic design as communication. Exercises and applied problems emphasize the relationship between form and meaning, typography, image making and conceptual development. Fulfills the Aesthetic Perspective. Ms. Wilson/Offered every year

**ARTS125 GRAPHIC DESIGN PROJECTS/STUDIO, LECTURE, DISCUSSION**

Intermediate-level projects in graphic design, with reference to particular design media such as books, identity, maps, exhibit design, Web sites, etc. Emphasis on exploring conceptual development and the problem-solving process. (Knowledge of Mac-based page-layout programs is helpful, but not required.) Prerequisite: ARTS124 or permission of the instructor. Ms. Wilson/Offered every year

**ARTS126 DIGITAL IMAGING**

The Structure of this course will be designed around working artistically within a computer-assisted studio environment. This implies those skills necessary to complete the digital cycle of input, editing and output and includes learning how to use various scanners, Adobe Photoshop, and printers to accomplish a variety of aesthetic looks. The integration of other studios into this process will be stressed via a series of workshops in the photography darkroom, the printmaking studio, etc. These workshops are intended to create an open forum in which the student can feel free to incorporate various creative skills into the digital-imaging process. This course is also intended as a venue for discussing the history, current practices, and social values of digital creativity in its various forms. These discussions will revolve around course readings designed to articulate concepts relative to computer-based artistic practices. Basic knowledge of traditional photographic process helpful. Digital camera of 5-mega-pixels suggested. Mr. Jalbert/Offered every year

**ARTS127 ANALYSIS OF THEATER PRODUCTION/ SEMINAR**

See Theater Arts 127.

**ARTS128 DRAWING: SENSE OF PLACE**

Students will engage the environment of Worcester by drawing on site at a variety of locations, from abandoned factories to Victorian parks, a littered railbed to a wooded Quaker cemetery. By actively looking, we will forge a connection to this city, while recognizing other relationships to place—including the archetypal places we carry or inhabit within ourselves. The emphasis will be on learning how to see where we are and to be more fully aware of how this relationship to place defines us. Globalization, Internet intimacy, easy mobility and politics may all influence our understanding and feelings about place, but there is perhaps nothing so immediate and illuminating as the act of simply perceiving and translating the world around us. Artists who have referenced or manipulated “place” in their work will also be studied. Fulfills the Aesthetic Perspective. Ms. Crocker/Offered periodically

**ARTS129 DRAWING: THE BODY/STUDIO, LECTURE, DISCUSSION**

Focuses on the human form through various drawing methods, with analysis of the structure and anatomy of the body, as well as exploration of the expressive potential and symbolic associations of the human figure. Ms. Crocker/Offered every year

**ARTS132 PAINTING I/STUDIO, LECTURE, DISCUSSION**

Seeing and Believing/Rotating Faculty: Emphasis on representational painting strategies. Introduces the fundamentals of craft and explores the synthetic possibilities of paint, while discussing the conceptual basis for this medium (Why paint?). Focuses on material—both the materials employed by the painter, and the materials the painter simulates. Painting as a vehicle for thinking and communication will be stressed. Self Made Worlds/Rotating Faculty: Emphasis on constructing alternative realities. The painted image has been with us since the first handprint appeared on a cave wall. It remains an intimate and powerful index of an individual's quest for self-expression, and acts as a mirror of culture's changing image of itself. The basic toolbox of painting techniques will be explored along with an introduction to painters and painting concerns from the past through to the contemporary moment. The emphasis of this course will shift depending on the professor. ARTS102 Visual Studies: Drawing or its equivalent is highly recommended. Fulfills the Aesthetic Perspective. Offered every year



**ARTS133 PAINTING II/STUDIO, LECTURE, DISCUSSION**

Beyond the Surface/Rotating Faculty: Emphasis on representational painting, but we will also strive to see beyond the appearance of things. This course will continue an exploration of painting techniques including more experimental media and approaches to the depiction of form and space on a two-dimensional surface. The game of illusion in trompe l'oeil will challenge the student as will the metaphysics of apprehending the physical world. Can the invisible be made visible? States of Being/Rotating Faculty: After a basic introduction to painting, one can experience more elaborate and personal directions within the medium. Ms Walker will look at alternative notions of space and states of being such as micro/macro, dream and psychological states, as well as cyberspace. Painting II again taught from varying perspectives based on the studio work of each professor. ARTS102 and 132 recommended. Offered every year.

**ARTS136 INTRODUCTION TO SCULPTURE/STUDIO, LECTURE, DISCUSSION**

The basic premise of this sculpture course is to acquaint the student with the formal aspects of aesthetic objects. The semester will begin in low relief and work progressively towards fully realized three-dimensional objects. Along the way we will build fundamental skills, working with hand tools, some power tools and building a vocabulary to establish a solid foundation in the conceptual process of making sculpture. Open to nonmajors. Fulfills the Aesthetic Perspective. Mr. Murdoch/Offered every year

**ARTS137 SCULPTURE PROJECTS/STUDIO, LECTURE, DISCUSSION**

Intermediate course focused on contemporary issues of sculpture and objects in a spatial environment. As the semester progresses we will move from solid form to space and environment. This class will look closely at some of the most current artists and their projects. We will examine the world around us and discover how objects and people interact and the meaning described by this interaction. Open to nonmajors. ARTS136 recommended. Mr. Murdoch/Offered every year

**ARTS158 PRINTMAKING I/STUDIO, LECTURE, DISCUSSION**

A survey of printmaking techniques and aesthetics including: relief and intaglio printing, linoleum cuts, etching methods using metal plates, and collagraph prints. Open to nonmajors. Fulfills Aesthetic Perspective. Ms. Hilton/Offered every year

**ARTS161 PRINTMAKING II: EXPERIMENTAL MEDIA/STUDIO, LECTURE, DISCUSSION**

A further investigation into the diverse materials of printmaking. Relief, serigraphs, collagraphs, monotype, and intaglio methods will be used to gain a richer knowledge of the medium. Open to all students. Ms. Hilton/Offered every year

**ARTS162 EXPLORING THE NATURAL WORLD: SEEDING ARTISTIC PROCESS WITH DRAWING, MONOTYPE AND MIXED MEDIA**

This class explores the natural world as visual model and studies organic process as a metaphor for artistic process. With close observation of Nature's forms and structures, students sharpen their eyes and experiment with different field-drawing techniques. Numerous drawing expeditions produce a collection of images to use as seeds for finished drawings and prints. Students are encouraged to experiment with a variety of materials and create an individual final project in one or more of the media covered. Prerequisite: one of the following—ARTS100, 102, 128, 129 or instructor permission. Ms. Claff/Offered every year very year

**ARTS171 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION**

See Screen Studies 171.

**ARTS182 TECHNICAL THEATER/STUDIO, LECTURE**

See Theater Arts 120.

**ARTS200 PHOTOGRAPHY PROJECTS/STUDIO, LECTURE, DISCUSSION**

Continues the study of the techniques and aesthetics of black-and-white photography. Students have the opportunity to pursue individual photographic projects in the size and format of their choice. Open to nonmajors. Prerequisite: ARTS120 and/or 121. Mr. DiRado, Staff/Offered periodically

**ARTS204 SACRED SPACE/LECTURE, DISCUSSION, PROJECTS**

Explores traditional and contemporary experiences of the sacred in spatial terms—through study of spatial and natural archetypes (i.e., mandala, threshold, cave, mountain); geometric harmonies in nature, art and architecture; sacred and secular architectural forms (temple, stupa, shrine, indigenous village architecture); geomancy or the relationship between built and natural environments; and ancient and contemporary expressions of the natural world as Gaia, manitou or sacred geography. Ms. Buie/Offered every year

**ARTS205 EROS AND THANATOS/SEMINAR, DISCUSSION, PROJECTS**

An interdisciplinary seminar exploring the nature of the life-energy we call eros and its relationship to thanatos, or death, with an emphasis on deepening our understanding of our relationship to the natural world. Ms. Buie and Mr. Wright/Offered periodically

**ARTS208 TYPOGRAPHY**

Study of the informational and expressive dimensions of typographical language. The history and technology of type is considered, with an opportunity to handset metal type, as well as do extensive work on the computer. Applications to a variety of problems, including letterhead, poster and publication design. Prerequisites ARTS124 and/or 125, or permission of instructor. Ms. Buie/Offered every year

**ARTS209 INTRODUCTION TO INTERACTIVE DESIGN**

Explores the basic principles of interactive design and development for the computer screen and the Web in general, through lectures, critiques, workshops and assignments. Staff/Offered every year

**ARTS225 ADVANCED THEATRICAL DESIGN PROJECTS**

See Theater Arts 225.

**ARTS226 ADVANCED PRODUCTION PROJECTS**

See Theater Arts 226.

**ARTS234 STUDIO TOPICS/CAPSTONE, CRITIQUE, DISCUSSION, PROJECTS**

Students will create significant individual works within a peer group framed by contemporary topics that vary each fall. This interdisciplinary course is structured as a seminar and requires extensive student participation in discussions, as well as independent creative work in a chosen medium. Topics will revolve around both timeless and highly contemporary issues confronting the artist in the making of his/her work. Will involve readings and some writing. Majors only and must have taken at least 7 studio art classes. Rotating Faculty/Offered every year

**ARTS250 ADVANCED PHOTOGRAPHY STUDIO**

Rotating Faculty/Offered periodically.

**ARTS254 GRAPHIC DESIGN STUDIO**

Advanced applied problems involving the role of designers in professional practice, working with clients and organizations. Consideration of the role of and opportunities for design in meeting communication needs. Prerequisites: ARTS 124, ARTS 125, and ARTS 208, or permission of the instructor. Ms. Buie/Offered every year

**ARTS258 PRINTMAKING WORKSHOP: ARTIST BOOKS/STUDIO, DISCUSSION**

Students will refine technical ability in printmaking, sharpen critical-thinking abilities and develop a personal iconography. Independent work and thematic progression is encouraged. Prerequisite: appropriate beginning/intermediate studio art courses or instructor permission. Ms. Hilton/Offered every year

**ARTS266 SCULPTURE STUDIO**

Catering to the particular needs of the individual student, this course is structured to mentor, as well as focus on a course of study. Assignments are student directed, through class critique and one-on-one dialogue, students will present projects and gain feedback from the group. This course is designed to help the student find his or her personal voice working in sculptural form. May be taken for credit more than once. Prerequisite: appropriate sculpture experience and instructor permission. Mr. Murdoch/Offered every year

**ARTS270 PRINTMAKING STUDIO**

Advanced individual study in printmaking. May be taken for credit more than once. Prerequisite: ARTS158 or ARTS161 or ARTS258 or instructor permission. Ms. Hilton/Offered every year

**ARTS280 ADVANCED STUDIO IN PAINTING AND DRAWING**

Advanced work in various 2-D media. Students will be encouraged to develop personal iconography and content, refine technique, and expand awareness of the relationship of their work to the larger world. This class will not be assignment-driven, but will enable the serious student to engage in focused work, serial studies, and autonomous investigation under the guidance of a faculty mentor. Ms. Crocker or visiting faculty/Offered periodically.

**ARTS289 SENIOR THESIS**

Advanced seminar for studio art majors in any concentration. Working independently, but in close consultation with the instructor and interaction with the class peer group, the student will prepare a cohesive and mature body of work to be presented in a group exhibition in the University Gallery and to a faculty committee with oral and written support to be considered for honors. This work should demonstrate original thinking and a high level of technical mastery. Prerequisite: ARTS234 or instructor permission. Rotating Faculty/Offered every year

**ARTS298 INTERNSHIP****ARTS299 DIRECTED STUDY****SCRN214 SOCIAL AND CULTURAL ISSUE DOCUMENTARY**

An advanced workshop in documentary production. Using digital video technology, students will design, produce, and edit three short documentaries on contemporary social or cultural issues. Student films will be viewed and critiqued in class. Critical viewing and class discussions will identify and analyze the elements of effective non-fiction storytelling, and will explore realities and decisions faced by documentary filmmakers, e.g., point of view, objectivity, voice, and the ethical

dilemmas often confronted by the documentary filmmaker. To take this course, a student must be proficient in the basic skills of production. Prerequisite: SCRNI07 or ARTS107 or TA107 or COMM107 or permission. Mr. Simon/Offered every other year

**TA125 THEATRICAL/COSTUME DESIGN PROJECTS/STUDIO, TUTORIAL**

See Theater Arts 125.

**THEATER ARTS****Program Faculty**

Gino DiIorio, M.F.A. - *Director*  
Raymond Munro, M.A.H.

**Adjunct Faculty**

Paul Burke, Ph.D.  
Michael Spingler, Ph.D.  
Virginia Mason Vaughan, Ph.D.

**Part-Time Faculty**

Angela Brazil, M.F.A.  
Jessie Darrell, B.A.  
Rebekah Fontane, B.A., *Modern Dance*  
Charise Greene, M.F.A.  
Diane Hovenesian, B.A., C.A.T.  
Catherine Quick Spingler, M.A.  
Stephen Thorne, M.F.A.  
Christine Weinrobe, B.F.A.  
Dan Zisson, B.A., *Stage Combat*

**Program Overview**

At the core of the theater program is the strong belief that a liberal-arts education is inherently inseparable to the artist's process. This relationship provides a cornerstone for the practice and study of theater, as theater by its very nature is a multidisciplinary art form. The theater program is designed to attain a balance between a strong liberal-arts education and intensive study in the student's chosen area of focus.

The program places a strong emphasis on performance as a teaching tool for students at many different levels of work. Each semester, the program presents professionally directed productions of classic and contemporary theater. There are also opportunities to act and direct in student sponsored classes, workshops and productions. Theater productions are open to all Clark students. The program is designed to meet the needs of the major who may eventually wish to pursue a professional career in theater, as well as the nonmajor, who may simply want to gain a greater understanding of the play or the performance process.

The Center for Contemporary Performance is a scholarly community of directors, composers, playwrights, choreographers, film/video makers and critics devoted to the creation, development and publication of contemporary works of art. The center is designed to enhance the academic work of the University by organizing and focusing advanced learning through seminars and directed study in music, theater, film, design, literature and aesthetics. The center enables students and faculty to work with visiting artists and outside performance groups, thereby enriching their educational experience and the creative process. Advanced students are encouraged to develop creative and theoretical projects to take advantage of the critical evaluation and supervision available through the Center for Contemporary Performance.



The theater-arts major is designed to offer an interdisciplinary framework that serves as foundation for the student to enter their primary area of expertise. Once the basic course requirements have been fulfilled, there is a great deal of flexibility in developing a program well suited to the individual needs and interests of the student. The faculty takes a proactive role in the design of this program, preparing the student to enter their chosen field or next level of study.

## Undergraduate Requirements

The major consists of 13 courses: five core courses, five specialty courses (focusing on the student's area of expertise and interest), and three related courses (chosen to complement the student's professional program). The five core courses are required of all majors. Majors may specialize in acting, directing, technical theater, dramatic criticism and playwriting, as well student-initiated areas of study and focus. Related Visual & Performing Arts courses are to be chosen in consultation with an adviser.

Required of all majors:

### 1. Core Courses

TA112 The Creative Actor  
TA120 Basic Technical Theater  
TA153 Modern Drama  
TA144 Drama of the Western Tradition  
TA212 Actor as Thinker

### 2. Specialty Courses

Five theater-arts courses specializing in a single area (acting, directing, technical theater, dramatic criticism, theatrical design, playwriting). At least two of these courses must be at the 200 level.

### 3. Related Courses

A set of three courses in the Visual and Performing Arts outside of Theater (i.e. Screen, Art History, Studio Art and/or Music). These courses must be picked in consultation with the student's advisor.

## Theater Minor Requirements

TA112 The Creative Actor  
TA212 Actor as Thinker  
TA154 Modern Drama  
TA144 Drama of the Western Tradition  
TA120 Basic Technical Theater  
Plus One Additional 200 Level Theater Course

## Honors Program

Students with distinguished academic records who wish to take honors in theater arts should consult the program director early in their junior year to identify a project of interest and choose an honors adviser. The student is expected to use the honors program to develop an independent work, which displays their skills and capabilities in their chosen field. This can take the form of writing a play, performing a role, etc., with an emphasis on attaining a professional standard of work. The thesis must be performed and/or presented as a senior and will be reviewed by a faculty panel.

## Courses

### TA012 HOW TO ACT RIGHT - ON & OFF THE STAGE/FIRST-YEAR SEMINAR

How to Act Right is primarily a basic acting course but with an added research component. The content of the course is presented and explored through lectures and exercises. The students take their newly informed grasp of the art of acting and working from their experience with dramatic structure, character development and improvisation

they break into research teams and explore acting throughout their everyday life and culture. Some possible topics would include acting and Presidential politics, the acting process in undercover work, acting and role playing in Psychology, and acting as metaphor in Literature, Philosophy and Spiritual Traditions. The training approach in the course is integral. Because acting demands that its practitioners utilize all aspects of there beings, students will work to develop their many levels simultaneously, i.e. physically, emotionally, cognitively and spiritually. Fulfills the Aesthetic Perspective requirement. Mr. Munro/ Offered periodically

### TA107 INTRODUCTION TO VIDEO PRODUCTION

See Screen Studies 107.

### TA108 PARIS AND 20TH CENTURY ARTISTIC MOVEMENTS: ART, THEATER AND CINEMA

See French 108.

### TA109 CONTEMPORARY WOMEN PLAYWRIGHTS

This course is designed to introduce the student to the works of major women playwrights of the past 100 years. While there is some focus on the early part of the 20th century, the primary study will be of plays written in the past 30 years. In studying the plays, a number of different points of view and reference will be considered including that of the playwright, actor, director, historian and dramaturge. The student is encouraged to formulate a personal opinion of these plays and dramatists. Mr. DiIorio/Offered biannually

### TA111 VOICE AND DICTION/STUDIO, TUTORIAL

An intensified phonetic approach to articulation and voice production with some emphasis on speech for the stage and for public occasions. Several laboratory sessions will be provided for individual coaching by the instructor. Staff/Offered every year

### TA112 THE CREATIVE ACTOR/STUDIO

Through a series of workshops, the student becomes familiar with the basic tools necessary to the art of acting. The approach is based on the techniques of Stanislavski, Viola Spolin, Joseph Chaikin, Robert Cohen and original exercises, including an introduction to basic voice and movement for the actor. Limited to 25 students. Staff/Offered every semester

### TA114 INTRODUCTION TO SHAKESPEARE/LECTURE, DISCUSSION

See English 120.

### TA116 MOVEMENT FOR THE PERFORMING ARTIST: THE ALEXANDER TECHNIQUE/STUDIO

The Alexander Technique is a mind/body teaching method that employs experiential learning. The course will focus on moving and thinking freely in the artistic process and everyday life. Students will learn how to recognize and change habits that cause unnecessary worry, tension and fatigue. Performance movement, public speaking and other activities will be used as ways for students to observe themselves in action. By understanding how they respond in activity, students will become adept at making choices, which will encourage their innate ability to work and perform with freedom and ease. Ms. Hovenisian/Offered every year

### TA119 PUBLIC SPEAKING/STUDIO

Students are required to make as many speeches as time permits, so that they may master the fundamentals of public speaking, including the most common situations: presentation of information and persuasive speaking. Ms. Hovenesian/Offered every year

**TA120 TECHNICAL THEATER/STUDIO, LECTURE**

Introduction to theatrical production. Techniques and organization involved in providing the stage with scenery, lights and properties. Introduces drafting, scaled ground plans, elements of design and styles of production. Makeup, lighting and set construction in applied lab/crew requirements. Ms. Weinrobe/Offered every semester

**TA123 DESIGN FOR PERFORMANCE/STUDIO, TUTORIAL**

Theory of design/function of visual artist in relationship to production, director or choreographer. Collaboration in and development of performance art. Historical research in styles of ornament and production. Drawing, painting and model building. Lab/crew assignments. Ms. Weinrobe/Offered periodically

**TA125 THEATRICAL/COSTUME DESIGN PROJECTS/STUDIO, TUTORIAL**

Intermediate-level projects in design and presentation techniques for theater productions. Work in areas of scenery, costume or lighting design. Prerequisite: TA120. Staff/Offered periodically

**TA126 THE PHYSICAL THEATER/ENVIRONMENTAL STUDIO/STUDIO, TUTORIAL**

Study of designed environment and structure as it relates to performance and the physical theater as well as contemporary installation projects. Study of public spaces, theater architecture and site-specific work. Ms. Weinrobe/ Offered periodically

**TA127 ANALYSIS OF THEATER PRODUCTION/ SEMINAR**

Examination of live theater productions through written and verbal criticism. Critical elements of the concept of production explored through assigned readings and the development of a production proposal/concept. Attendance required at scheduled evening and/or weekend performances in the Worcester/Boston area. A lab fee will be collected to pay for tickets and bus rental. Ms. Weinrobe/Offered periodically

**TA130 DANCE I: MODERN DANCE**

Modern Dance is a studio course exploring creativity, designed to introduce beginning and intermediate dancers to the rudimentary principles of Modern Dance. The course incorporates movements with other disciplines, focusing not only on dance technique but also beginning choreography. Students meet once a week for three hours, participating in warm up and floor exercises, and making beginning dances. Ms. Bluth/Offered every other year

**TA131 MODERN DANCE II: CHOREOGRAPHY & IMPROVISATION**

This is a basic course in creating, composing, and performing new dance works while emphasizing the diversity of techniques and methods available to the choreographer. The main focus of the course is dance composition. Students will explore and develop skills used in the dance making process, as well as learn skills of movement improvisation and partnering. Students will also learn to perceive and analyze dance composition by watching videos and writing reviews. The course meets once a week. Limited to 15 students. Prerequisite: TA130 or instructor permission. Ms. Bluth/Offered annually

**TA132 MODERN REPERTORY**

In this class students will make a piece of choreography from beginning to end, directed by the instructor. This piece will be performed informally at the end of the semester. The class will start with a group warm-up that will lead into a rehearsal, in which students will both learn material given to them by the instructor, and also create their own material to be used in the choreography. Permission of instructor required. Ms. Bluth

**TA143 TERRIBLE BEAUTY: THE ART OF TRAGEDY/LECTURE, DISCUSSION**

See English 143.

**TA144 DRAMA OF THE WESTERN TRADITION/LECTURE, DISCUSSION**

See English 144.

**TA150 THE NEW GERMAN CINEMA/LECTURE, DISCUSSION**

See German 150.

**TA153 MODERN DRAMA/LECTURE, DISCUSSION**

This is a course designed to introduce the student to the major dramatic writers from the 19th century to the present. In studying the plays, a number of different points of view and reference will be considered including that of the playwright, the actor, the director, the historian, the dramaturge. The student is encouraged to formulate a personal opinion of these plays and dramatists. The major focus of the course is the text and the student's understanding and interpretation of the work. However, a strong emphasis will also be placed on the performance aspect of these plays. This can take many forms, including coordination of our efforts with theater classes on campus, field trips to theaters nearby, use of video, and even staged readings of the scripts in class. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to choose this seminar. Mr. DiIorio/Offered every year/First-Year Seminar

**TA159 FRENCH CULTURE SEEN THROUGH FILM: JEAN RENOIR/LECTURE DISCUSSION**

See French 160.

**TA169 THEATER WORKSHOP IN FRENCH/LECTURE, DISCUSSION**

See French 165.

**TA170 THE COMIC SPIRIT IN FRENCH THEATER AND FILM/LECTURE, DISCUSSION**

See French 170.

**TA171 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION**

See Screen Studies 171.

**TA204 SOCIAL AND CULTURAL ISSUE DOCUMENTARY**

See Screen Studies 214.

**TA205 CONTEMPORARY POLITICAL PLAYS**

This course explores plays and playwrights dealing with a wide range of political topics written within the past 30 years. The plays will be analyzed through both a dramaturgical and historical context. A number of issues will be considered including aids, race, war, the holocaust, the Middle East, sexuality, and illness. Above all, we will analyze and discuss what it is that makes a play political? Mr. DiIorio/Offered periodically

**TA205 THE PLAY AND ITS STAGES/SEMINAR, WORKSHOP**

A critical approach to the dramatic text based on historical and material conditions of performance. Considers the changing ways that meanings are made through styles and conventions of performance (including set, costume, mask and vocal delivery), which are specific to historical and cultural moments. Playwrights considered may include Sophocles, Shakespeare, Racine, Molière, Chekhov, Ibsen, Brecht, Genet and Beckett. Scene work. Mr. Spingler/Offered periodically

**TA206 LANGUAGES OF THEATER/SEMINAR, DISCUSSION**

See Comparative Literature 206.



**TA209 WRITING OUT LOUD/WORKSHOP**

See English 209.

**TA212 ACTOR AS THINKER/STUDIO, LECTURE, DISCUSSION**

A conceptual approach to acting theory and its application. Student develops a greater understanding of script analysis, characterization, style and the relationship of the actor to the audience. A basic course for all students who intend to continue in acting and directing, and a prerequisite for TA213 Studio and TA219 Directing Seminar.

Prerequisite: TA112. Limited to 15 students. Mr. Munro/Offered every year

**TA213 STUDIO**

A scene-study course applying the methods, theories and approaches discussed in Actor as Thinker to working on stage, film and video. Students are required to present several scenes of different periods and styles for discussion, critical written review and further development by classmates and director. Content varies each time the course is taught. May be repeated for credit. Lab and crew hours are required.

Prerequisite: TA212. Mr. Munro, Mr. DiIorio, Ms. Brazil/Offered every year

**TA214 SHAKESPEARE IN ACTION/STUDIO**

This acting course concentrates on the major works (Hamlet, Macbeth, Twelfth Night, Romeo and Juliet, etc.), giving the actor an introduction to Shakespeare. The actor is encouraged to maintain the same approach and techniques used in other scene work, while adding the challenge of verse and heightened language. The focus of the class is to take a Shakespearean play and create the illusion of the first-time performance. Mr. DiIorio/Offered periodically

**TA215 STAGE COMBAT**

This class will offer an introduction to stage combat, a vocabulary, a process and a basis for safe exploration of violent action in theater. The first three weeks will be spent on hand-to-hand basics: shared weight improvisation, tumbling (the safe way to fall), learning moves, positions and reactions. The second three weeks will focus on learning the basics of weapons fighting. Using wooden dowels as weapons, we will cover the basics of footwork and hand positions in Staff fighting, Broadsword, Rapier and Dagger, and Small Sword. In latter classes, students will work on implementing techniques into a complete fight. Limited to 12 Theater majors, non-majors require permission.

Staff/Offered every year

**TA216 CONTEMPORARY WOMEN PLAYWRIGHTS**

This course is designed to introduce the student to the works of major women playwrights of the past 100 years. While there is some focus on the early part of the 20th century, the primary study will be of plays written in the past 30 years. In studying the plays, a number of different points of view and reference will be considered including that of the playwright, actor, director, historian and dramaturge. The student is encouraged to formulate a personal opinion of these plays and dramatists. Mr. DiIorio/Offered biannually

**TA219 DIRECTING SEMINAR**

Introduces the principles of directing for the stage through theory, practical application and discussion. Students study problems of interpretation and concept; the role of the director as creative and interpretive artist; and relationship to designer, stage manager and actors. Additional lab time is required. Prerequisites: TA213 and instructor permission. Mr. Munro/Offered every year

**TA225 ADVANCED THEATRICAL DESIGN PROJECTS**

Advanced-level projects in design. May be repeated for credit.

Prerequisite: instructor permission. Ms. Weinrobe

**TA226 ADVANCED PRODUCTION PROJECTS**

Introduces the business and practical execution of theater productions. Students learn techniques in organizing and managing different areas and departments. Requirements include participating in a supervisory position on a department show. Positions in outside theaters accepted for credit. Ms. Weinrobe

**TA230 PLAYWRITING**

Students learn basic techniques of stagecraft including dialogue and character development, as well as dramatic structure and the technical elements of a play. Students will write every week and complete assignments to be read in class. Mr. DiIorio/Offered every year

**TA235 ADVANCED PLAYWRITING WORKSHOP**

This workshop is designed to facilitate the work of advanced playwrights and actors. Writers will develop scenes every week to be performed by the actors in the workshop. There will be an open discussion of the strengths and weaknesses of the piece from the perspectives of both performer and writer. The goal is to strengthen this relationship through constant work and critique. Every month, students will give a public performance of some of the scenes written for class. Open to writers and performers. Course may be repeated for credit.

Mr. DiIorio/Offered periodically

**TA236 PLAYWRITING II**

This is a course for advanced playwrights who want to bring their work to a higher level. As a result, much is expected in terms of productivity and quality. Students will write a minimum of 10 new pages per week, in addition to rewrites that are suggested in and out of class. New pages will be read and critiqued in class each week. There will be an open discussion of the strengths and weaknesses of the piece from the perspectives of both performer and writer. The goal is to strengthen this relationship through constant work and critique. Every month, students will give a public performance of some of the scenes written for class. By semester's end, each student will have completed one full-length play and a complete act of another full length. Playwriting I is a prerequisite. Permission is also required. Mr. DiIorio/Offered periodically

**TA253 ADVANCED STUDIES IN SHAKESPEARE/SEMINAR**

See English 253.

**TA256 SHAKESPEARE FROM PAGE TO STAGE/LECTURE, WORKSHOP**

See English 256.

**TA297 HONORS**

Staff

**TA298 INTERNSHIP**

Staff

**TA299 DIRECTED STUDY**

Staff

**Program Faculty**

Amy Richter, Ph.D. - *Director*  
Kristen Williams, Ph.D. - *Director*  
María Acosta Cruz, Ph.D.  
Michael Addis, Ph.D.  
Margarete Arndt, D.B.A.  
Kiran Asher, Ph.D.  
Belén Atienza, Ph.D.  
Parminder Bhachu, Ph.D.  
Michael Butler, Ph.D.  
Marcia Butzel, Ph.D.  
Carol D'Lugo, Ph.D.  
Judith DeCew, Ph.D.  
Gino DiIorio, M.F.A.  
Jody Emel, Ph.D.  
Patricia Ewick, Ph.D.  
Rachel Falmagne, Ph.D.  
Odile Ferly, Ph.D.  
William Fisher, Ph.D.  
Ellen E. Foley, Ph.D.  
Beth Gale, Ph.D.  
SunHee Kim Gertz, Ph.D.  
Abbie Goldberg, Ph.D.  
Janette T. Greenwood, Ph.D.  
Betsy P. Huang, Ph.D.  
Fern Johnson, Ph.D.  
Lisa Kasmer, Ph.D.  
Sharon Krefetz, Ph.D.  
Thomas Kuehne, Ph.D.  
Nina Kushner, Ph.D.  
Deborah Martin, Ph.D.  
Heather L. Roberts, Ph.D.  
Dianne Rocheleau, Ph.D.  
Paul Ropp, Ph.D.  
Robert Ross, Ph.D.  
Laurie Ross, Ph.D.  
Srinivasan Sitaraman, Ph.D.  
Valerie Sperling, Ph.D.  
Shelly Tenenbaum, Ph.D.  
Alice Valentine, M.A.  
Virginia Mason Vaughan, Ph.D.  
Kristina Wilson, Ph.D.

**Research Faculty**

Cynthia Enloe, Ph.D.  
Susan Hanson, Ph.D.  
Barbara Thomas-Slayter, Ph.D.

**Emeriti Faculty**

Serena S. Hilsinger, Ph.D.  
Dorothy Kauffman, Ph.D.

**Program Overview**

Clark launched its Women's Studies program in 1979. In spring 2006, the university approved the Women's and Gender Studies (WGS) major, effective fall 2006. The Women's and Gender Studies major provides students with a solid foundation in women's studies and gender analysis, introduces them to a range of disciplinary approaches to women and gender, and helps them to develop an area of specialization within the field. Courses stress the importance of social ideas and relationships such as those shaped by gender, ethnicity, race, and class to understand better individual and collective experiences, past and present. The major requires a minor in another field (and encourages a double major) in order to reinforce connections with existing majors.

WGS courses are offered by faculty throughout the university, but students are required to take three core courses within the Women's Studies Program: Introduction to Women's Studies, Feminist Theory, and a Senior Capstone seminar. With the exception of these core courses, most offerings are cross-listed with the departments in which they originate.

**Undergraduate Requirements**

All Women's and Gender Studies majors must take ten (10) WGS courses, as well as complete a minor or a second major in another field. The major requirements are:

- Three Core Courses: Introduction to Women's Studies, Feminist Theory, and a Senior Capstone seminar
- Three Introductory or 100-Level Courses from three different departments
- Three 200-Level Courses in a chosen theme or area of specialization from at least two different departments. Students will design a specialization in consultation with their adviser and must receive the approval of the Women's and Gender Studies director. Possible specializations include, but are not limited to: Women and Work; Gender and Environment; Gender, Culture and Human rights; Gender Identity and Sexuality.
- One Methods or Skills course related to student's WGS specialization. This course may overlap with the required minor or second major.

The Women's and Gender Studies director will help students identify an adviser based on WGS specialization, minor field, or second major. Advisers will be drawn from WGS faculty across the university.

**Core Courses**

WS110 Introduction to Women's Studies  
WS200 Feminist Theory  
Senior Capstone WGS299, 296, or other

Students may also satisfy the capstone requirement with an approved Women's and Gender Studies Seminar or an Internship Seminar, both of which may be cross-listed with another department. The capstone may also be an individual internship or a special project completed under the supervision of a WGS faculty member. All WGS capstones must include a major research paper or essay.



**Capstone seminars include, but are not limited to, the following:**

- GOVT283 Global AIDS: The Pandemic in Comparative Perspective
- SOC294 Global Ethnographies: Ethnographers in the Making for the 21st Century
- SOC296 Internship-Seminar on Gender
- PSYC275 Societal Approaches to Thinking
- PSYC295 Advanced Topics on Gender and Society

**Introductory or 100-level courses from a different department:**

**English**

- ENG133 Survey of Women Writers I
- ENG134 Survey of Women Writers II

**Foreign Language and Literature**

- FREN112 Fairy Tales of the World
- JAPN190 Japanese Women Writers

**Geography**

- GEOG136 Gender and Environment

**Government and International Relations**

- GOVT102 Women and War (First-Year Seminar)
- GOVT117 Revolution and Political Violence
- GOVT147 World Order and Globalization
- GOVT175 Women and U.S. Politics

**History**

- HIST037 19th-Century American Through Women's Eyes
- HIST219 Women in American History\*
- HIST229 Women in European History\*
- HIST282 Chinese Women in Literature and Society\*

\*These selected 200-level courses can count towards the "Introductory/100 level" requirement.

**International Development and Social Change**

- ID120 Introduction to Cultural Anthropology
- ID125 Tales from the Far Side
- ID131 Local Action Global Change

**Psychology**

- PSYC265 Psychology of Men and Masculinity (First-Year Seminar)

**Sociology**

- SOC090 No Sweat (First-Year Seminar)
- SOC176 The Family

**Visual and Performing Arts**

- TA109 Contemporary Women Playwrights

**200-Level Courses: Specialization in two or more departments**

Each student will define a field of specialization (comprising WGS courses in two or more departments) with her/his adviser, to be approved by the Women's and Gender Studies director. Examples could include: Women in Comparative Fiction; Women and Work; Gender and Environment; Gender, War and Militaries; Women and Social Change; Gender, Identity and Sexuality; Gender, Culture and Human Rights; Feminist Critiques of Globalization. These and other specialized fields can be developed from among the many courses offered within the following departments/programs:

**English**

- ENG242 Feminist Critical Theory
- ENG255 Studies in the Renaissance
- ENG260 Studies in 18th-Century British Literature (topic dependent)
- ENG262 Studies in 19th-Century British Literature (topic dependent)
- ENG263 British Romantic Literature
- ENG268 Regendering History: British Women Writing History
- ENG277 Race and Gender in African-American Literary Theory
- ENG295 Gender and Discourse

**Foreign Languages**

- CMLT208 History and Fiction of Caribbean Women Writers
- FREN211 Coming of Age in the French Novel
- SPAN236 Women in Hispanic Literature

**Geography**

- GEOG237 Feminism, Nature, and Culture
- GEOG244 Gender, Work, and Space
- GEOG258 Utopian Vision, Urban Reality
- GEOG277 Gender, Environment and Development

**Government and International Relations**

- GOVT201 AIDS Crisis in Africa
- GOVT275 Gender, Politics, and Development in Africa
- GOVT101 Gender Gap and American Politics
- GOVT283 Global AIDS: The Pandemic in Comparative Perspective

**History**

- HIST212 History of Sexuality: 1750 to present
- HIST213 Gender and the American City
- HIST219 History of American Women
- HIST229 Women in European History
- HIST234 Racial Thought/ Body Politics in Modern Western Societies
- HIST236 Gender, War and Genocide: Europe in the 20th Century
- HIST282 Chinese Women in Literature and Society

**International Development and Social Change**

- ID209 Beyond Victims and Guardian Angels
- ID269 Raced Nature, Gendered Development
- IDCE359 Humanitarian Assistance in Conflict/Postconflict
- ID285 Gender and Global Change
- IDCE30207 Alternating between International Feminist Thinking and Gender, Militarization and Development (Intensive seven-week seminar, 1/2 credit; WGS seniors only)
- IDCE30275 Gender and Development Planning (Intensive seven-week seminar, 1/2 credit; WGS seniors only)

**Management**

- MGMT222 Women in the Health-Care System
- MGMT5308 Women in Management (Intensive seven-week seminar, 1/2 credit, WGS seniors only)

**Philosophy**

- PHIL219 Feminist Theory

## Psychology

PSYC249 Women in Society

PSYC250 Gender, Families, Close Relationships

PSYC275 Societal Approaches to Thinking

PSYC295 Advanced Topics on Gender and Society

PSYC326 Feminist Perspectives on Mind, Self, Identity and Development

## Sociology

SOC258 Women in Jewish Culture

SOC275 Family Issues in an Aging Society

SOC294 Global Ethnographies: Ethnographers in the Making for the 21st Century

SOC296 Internship Seminar on Gender

## Visual and Performing Arts

ARTH248 Gender and Representation

SCRN288 Gender and Film

ARTS204 Sacred Space

**Methods and Skills:** One course relevant to student's WGS specialization may overlap with second major or minor. Alternative methods or skills classes may be approved by the Women's and Gender Studies director.

- ENG295 Gender and Discourse
- COMM248 Social Research Process
- GEOG107 Miracles of Asia: Economic Growth in Global Context
- GEOG210 Introduction to Quantitative Methods in Geography
- GOVT107 Research Methods
- HIST120 Writing History
- ID132 Research Methods
- PSYC105 Quantitative Methods
- SOC105 Social Research Process
- TA127 Analysis of Theater Production

## Women's and Gender Studies Minor

Students who wish to obtain a minor in women's and gender studies must meet the following requirements:

A minimum of six (6) WGS courses distributed as follows:

- WS110 Introduction to Women's Studies.
- Four additional courses listed as part of the WGS program (it is recommended that these include both social sciences and humanities). Two of these courses must be at the 200 level.
- A one-credit internship or special project, or advanced research seminar in WGS. All internships include readings and a faculty supervisor.

## Courses

**ENG133 SURVEY OF WOMEN WRITERS I/LECTURE, DISCUSSION**

See English 133.

**ENG277 RACE AND GENDER IN AFRICAN AMERICAN LITERARY THEORY/DISCUSSION**

See English 277.

**FREN256 NO MORE CLASSROOMS, NO MORE BOOKS: EDUCATION IN 20TH CENTURY FRENCH NOVEL AND FILM. LECTURE/DISCUSSION**

See French 256.

**GOVT102 POLITICAL SCIENCE FICTION/FIRST-YEAR SEMINAR**

See Government and International Relations 090.

**HIST234 RACIAL THOUGHT AND BODY POLITICS IN MODERN EUROPE (1500-2000)/SEMINAR**

See History 234.

**HIST236 GENDER, WAR AND GENOCIDE IN 20TH CENTURY EUROPE/SEMINAR**

See History 236.

**ID125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT/LECTURE, DISCUSSION**

See International Development and Social Change 125.

**ID285 GENDER AND GLOBAL CHANGE/LECTURE, DISCUSSION**

See International Development and Social Change 285.

**PSYC265 PSYCHOLOGY OF MEN/CAPSTONE SEMINAR**

See Psychology 265.

**PSYC275 SOCIETAL APPROACHES TO THINKING/CAPSTONE SEMINAR**

See Psychology 275.

**PSYC295 ADVANCED TOPICS ON GENDER AND SOCIETY/CAPSTONE SEMINAR**

See Psychology 295.

**SOC105 SOCIAL RESEARCH PROCESS/LECTURE, DISCUSSION**

See Sociology 105.

**SOC294 GLOBAL ETHNOGRAPHIES: ETHNOGRAPHERS IN THE MAKING FOR THE 21ST CENTURY/SEMINAR**

See Sociology 294.

**TA127 ANALYSIS OF THEATER PRODUCTION/ SEMINAR**

See Theater Arts 127.

**WS037 19TH-CENTURY AMERICA THROUGH WOMEN'S EYES/FIRST-YEAR SEMINAR**

See Women's and Gender Studies 037.

**WS040 THE WITCHCRAZE: WITCH HUNTS IN EARLY MODERN EUROPE/FIRST-YEAR SEMINAR**

See History 040.

**WS091 THE GENDER GAP AND AMERICAN POLITICS/FIRST-YEAR SEMINAR**

See Women's and Gender Studies 091.

**WS092 WOMEN AND WAR/FIRST-YEAR SEMINAR**

See Government and International Relations 092.

**WS109 CONTEMPORARY WOMEN PLAYWRIGHTS**

See Theater Arts 109.

**WS110 INTRODUCTION TO WOMEN'S STUDIES**

See History 111.

**WS112 FAIRY TALES OF THE WORLD/LECTURE, DISCUSSION/FIRST-YEAR SEMINAR**

See French 112.

**WS117 REVOLUTION AND POLITICAL VIOLENCE/LECTURE, DISCUSSION**

See Government and International Relations 117.

**WS131 LOCAL ACTION, GLOBAL CHANGE/LECTURE, DISCUSSION**

See International Development and Social Change 131.

**WS134 SURVEY OF WOMEN WRITERS II/LECTURE, DISCUSSION**

See English 134.

**WS138 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION**

See Geography 136.



**WS147 WORLD ORDER AND GLOBALIZATION/ DISCUSSION**

See Government and International Relations 147.

**WS175 WOMEN AND U.S. POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 175.

**WS190 JAPANESE WOMEN WRITERS**

See Japanese 190.

**WS201 THE HIV/AIDS CRISIS IN AFRICA**

See Government and International Relations 201.

**WS204 SACRED SPACE/LECTURE, DISCUSSION, PROJECTS**

See Studio Art 204.

**WS207 HER STORY: HISTORY AND FICTION OF CARIBBEAN WOMEN WRITERS**

See Comparative Literature 208.

**WS209 BEYOND VICTIMS AND GUARDIAN ANGELS: THIRD WORLD WOMEN, GENDER AND DEVELOPMENT/SEMINAR**

See International Development and Social Change 209.

**WS210 SPIRITED REBELLION: ADOLESCENCE FRENCH NOVEL AND FILM/LECTURE, DISCUSSION**

See French 211.

**WS212 HISTORY OF SEXUALITY: 1750 TO THE PRESENT/LECTURE, DISCUSSION**

See History 212.

**WS213 GENDER AND THE CITY IN THE UNITED STATES/SEMINAR**

See History 213.

**WS219 HISTORY OF AMERICAN WOMEN/LECTURE, DISCUSSION**

See History 219.

**WS229 WOMEN IN EUROPEAN HISTORY/LECTURE, DISCUSSION**

See History 229.

**WS236 WOMEN IN HISPANIC LITERATURE/LECTURE, DISCUSSION**

See Spanish 236.

**WS237 FEMINISM, NATURE AND CULTURE/ SEMINAR**

See Geography 237.

**WS247 WOMEN IN SOCIETY/FIRST SEMINAR**

See Psychology 249.

**WS248 GENDER AND REPRESENTATION/SEMINAR**

See Art History 248.

**WS249 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR**

See English 249.

**WS252 GENDER, FAMILIES AND CLOSE RELATIONSHIPS/FIRST SEMINAR**

See Psychology 250.

**WS254 THE PSYCHOLOGY OF COUPLES AND INTIMACY/FIRST SEMINAR**

See Psychology 256.

**WS256 STUDIES IN THE RENAISSANCE/SEMINAR**

See English 255.

**WS260 STUDIES IN 18TH-CENTURY BRITISH LITERATURE/SEMINAR**

See English 260.

**WS262 STUDIES IN 19TH-CENTURY BRITISH LITERATURE/SEMINAR**

See English 262.

**WS263 BRITISH ROMANTIC LITERATURE: RACE AND IMPERIALISM IN ROMANTICISM/SEMINAR**

See English 263.

**WS269 RACED NATURE, GENDERED DEVELOPMENTS: THE POLITICAL ECONOMY OF ENVIRONMENTAL CONSERVATION/SEMINAR**

See International Development and Social Change 269.

**WS273 GENDER, POLITICS AND DEVELOPMENT IN AFRICA/SEMINAR**

See Government and International Relations 275.

**WS277 GENDER, ENVIRONMENT AND DEVELOPMENT/SEMINAR**

See Geography 277.

**WS278 FAMILY ISSUES IN AN AGING SOCIETY/ SEMINAR**

See Sociology 275.

**WS282 CHINESE WOMEN IN LITERATURE AND SOCIETY/LECTURE, DISCUSSION**

See History 282.

**WS283 GLOBAL AIDS: THE PANDEMIC IN COMPARATIVE PERSPECTIVE/SEMINAR**

See Government and International Relations 283.

**WS288 GENDER AND FILM**

See Screen Studies 288.

**WS291 DANGEROUS WOMEN/SEMINAR**

See History 295.

**WS295 GENDER AND DISCOURSE/SEMINAR**

See English 295.

**WS296 INTERNSHIP SEMINAR:GENDER**

See Sociology 296.

**WS361 GENDER, MILITARIZATION AND DEVELOPMENT/7-WEEK MODULE (1/2 CREDIT)**

See Community Planning and Development 30207.

**WS386 GENDER IN DEVELOPMENT PLANNING/7-WEEK MODULE (1/2 CREDIT)**

See Community Planning and Development 30275.

# Concentrations



## ASIAN STUDIES

### Program Faculty

Paul Ropp, Ph.D., *Director*

Yuko Aoyama, Ph.D.

Jude Fernando, Ph.D.

William Fisher, Ph.D.

SunHee Kim Gertz, Ph.D.

Betsy P. Huang, Ph.D.

Wenhua Jin, Ph.D.

Kenneth MacLean, Ph.D.

Thomas Massey, Ph.D.

Srinivasan Sitaraman, Ph.D.

### Adjunct Faculty

Alice Valentine, M.A.

### Program Overview

Asian Studies is an interdisciplinary concentration that can be taken as a complement to any major. The concentration requires six Asian-studies courses. Of these six courses, three may be selected from language courses; the other three must be selected from nonlanguage courses. The concentration further requires that two of the nonlanguage courses must be 200-level courses and one must include a significant research component. Students concentrating in Asian studies are encouraged, though not required, to take at least one year of Chinese or Japanese language and to study one year or one semester abroad in Asia.

Through Clark's Study Abroad Office, students may apply to enroll at Kansai Gaidai University near Osaka, Japan, or at the CET program in Beijing, for language and other courses on Japan or China. Students may spend one year or one semester at Kansai Gaidai, which requires at least one year of Japanese language prior to study in Japan. The CET program in Beijing is available for one semester each year in the spring term. Enrollment in the CET program requires at least three semesters of Chinese language study prior to enrollment in China. Clark offers Chinese and Japanese language courses at the beginning and intermediate levels as well as advanced Japanese. Through the Colleges of Worcester Consortium, students may also take advanced Chinese and other Asia-related courses at the College of the Holy Cross.

### Courses

**AS033 CONFUCIANISM, DAOISM, BUDDHISM: THE CULTURAL HERITAGE OF CHINA/FIRST-YEAR SEMINAR**

See History 033.

**AS080 INTRODUCTION TO MODERN EAST ASIA/LECTURE, DISCUSSION**

See History 080.

**AS107 MIRACLES OF ASIA: ECONOMIC GROWTH IN GLOBAL CONTEXTS/LECTURE, DISCUSSION**

See Geography 107.

**AS180 JAPANESE CULTURE AND LITERATURE IN TRANSLATION/LECTURE, DISCUSSION**

See Japanese 180.

**AS181 CHINESE CIVILIZATION/LECTURE, DISCUSSION**

See History 181.

**AS182 MODERN CHINA/LECTURE, DISCUSSION**

See History 182.

**AS192 POLITICAL ECONOMY OF ASIA**

See Government and International Relations 192.

**AS225 POLITICAL ECONOMY, GEOGRAPHY, AND CULTURE IN SOUTH ASIA**

See International Development 225.

**AS233 CONFUCIANISM, DAOISM, BUDDHISM: INTELLECTUAL HISTORY OF CHINA/LECTURE, DISCUSSION**

See History 233.

**AS237 ASIANS AND JEWS IN THE US**

See English 237.

**AS254 STILL SPACES—EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR**

See English 254.

**AS279 FICTIONS OF ASIAN AMERICA/SEMINAR**

See English 279.

**AS281 CHINA RISING: THE PEOPLE'S REPUBLIC OF CHINA SINCE 1949/LECTURE, DISCUSSION**

See History 281.

**AS282 CHINESE WOMEN IN LITERATURE AND SOCIETY/LECTURE, DISCUSSION**

See History 282.

**AS288 SEMINAR IN CHINESE HISTORY/SEMINAR**

See History 288.

**AS290 POLITICAL DISSENT IN CHINESE HISTORY/SEMINAR**

See History 290.

**CHIN101 CHINESE 101-102 BEGINNING CHINESE/LECTURE, DISCUSSION**

See Chinese 101-102. Staff/Offered every year

**CHIN101 ELEMENTARY CHINESE/ LECTURE, DISCUSSION**

Introduces the Chinese language (standard Mandarin) for students with no background in Chinese. Focus is on all four language skills—speaking, listening, reading and writing—including the writing of Chinese characters. No credit is given for CHIN101 without successful completion of CHIN102. Staff/Offered every year

**CHIN103 INTERMEDIATE CHINESE/LECTURE, DISCUSSION**

See Chinese 103.

**ENG237 ASIANS AND JEWS IN THE UNITED STATES/LECTURE, DISCUSSION**

See English 237.

**HIST286 THE VIETNAM WAR/LECTURE, DISCUSSION**

See History 286.

**JAPN101 ELEMENTARY JAPANESE/LECTURE, DISCUSSION**

See Japanese 101.

**JAPN103 INTERMEDIATE JAPANESE/LECTURE, DISCUSSION**

See Japanese 103.

**JAPN190 JAPANESE WOMEN WRITERS**

See Japanese 190.



## BIOINFORMATICS

### Program Faculty

Li Han, Ph.D.

David Hibbett, Ph.D.

David Thurlow, Ph.D.

### Program Overview

Bioinformatics has developed at the juncture of the mathematical sciences and the life sciences; its development is analogous to that of molecular biology as a discipline in its own right. According to the National Institutes of Health (NIH), bioinformatics is “research, development or application of computational tools and approaches for expanding the use of biological, medical, behavioral or health data, including those to acquire, store, organize, archive, analyze or visualize such data.” Indeed, there is a consensus among observers that biology, regardless of the subspecialty, is being overwhelmed with a large amount of very complex data; what sets biology apart from other data-rich fields is the complexity rather than the sheer volume of the data produced. It is clear that collaboration between computer scientists, mathematicians, biologists and biochemists will be necessary to design information platforms that support the analysis of biological data. The application of mathematical and computational tools to all areas of biology is producing many exciting results, providing insights into biological problems too complex for traditional analysis.

The concentration in bioinformatics at Clark is offered by the departments of Mathematics and Computer Science in collaboration with the departments of Biology and Chemistry. It introduces students to some of the present paradigms and tools in this rapidly evolving discipline and combines knowledge of biology and chemistry with principles from mathematics and computer science that can be used to design tools to solve problems in the life sciences. It is especially well suited for undergraduates who are interested in the life sciences and enjoy quantitative thinking. Students who graduate with a concentration in bioinformatics will be in a strong position to go into industry or continue their education in graduate school either in their major or in a graduate program in bioinformatics.

### Undergraduate Requirements

#### Categories A, B or C

The concentration requires three core courses, plus three electives at least one of which must be at the 200 level. The electives may be chosen from a wide variety of mathematics, computer science, biology and biochemistry courses in consultation with an adviser. In particular the concentration is designed to be rigorous but flexible.

#### Course Requirements

1. CSCI120
2. CSCI121
3. BINF101
4. Three Electives:
  - a. At least one of these must be at the 200 level.
  - b. With the exception of BCMB majors, two of the three electives must be selected from two of the categories A, B, C, or D as listed below. BCMB majors require only one elective (from categories C or D) not directly related to the major. In all cases the third elective can come from any category.

- c. At least one may not count as an elective in the student's major, unless the student is doing a dual major in two of the majors listed below.

### Possible Bioinformatics Electives

There are a great deal of options in pursuing a Bioinformatics Concentration. Below is a listing of all possible electives a student may take.

#### Category A

BIOL105 Evolution  
BIOL109 Microbiology  
BIOL118 Genetics  
BIOL137 Cell Biology  
BIOL217 Ecology of Infectious Diseases  
BIOL218 Genetics and Disease  
BIOL221 Developmental Biology  
BIOL228 Molecular Genetics  
BIOL231 Recombinant DNA  
BIOL234 Signal Transduction  
BIOL250 Immunology  
BIOL254 Molecular Evolution and Systematics  
BIOL280 Biostatistics and Computer Applications

#### Category B

CHEM144 Bioanalytical Chemistry  
CHEM222 Statistical Thermodynamics  
CHEM279 Computer Biochemistry  
BCMB264 Biophysical Chemistry  
CHEM266 Biomolecular NMR  
BCMB271 Biochemistry 1  
CHEM273 Principles of Molecular Modeling  
BCMB228 Molecular Genetics

#### Category C

CSCI140 Computer Organization  
CSCI160 Data Structures  
CSCI180 Automata Theory  
CSCI210 Artificial Intelligence  
CSCI212 Scientific Computing  
CSCI215 Operating Systems  
CSCI220 Database Systems  
CSCI230 Compiler Design  
CSCI240 Computer Architecture  
CSCI250 Software Design  
CSCI270 Theory of Computation  
CSCI280 Computer Networks  
CSCI290 Computer Graphics

#### Category D

MATH131 Multivariate Calculus  
MATH172 Introduction to Analysis  
MATH212 Numerical Analysis  
MATH214 Modern Analysis  
MATH216 Complex Variables  
MATH217 Probability  
MATH218 Statistics  
MATH225 Modern Algebra  
MATH228 Topology  
MATH244 Differential Equations

Two electives (see note b) must come from two of the following categories:

**Major**

Biology..... Categories B, C or D  
Chemistry..... Categories A, C or D  
Biochemistry and Molecular Biology ..... Categories C or D  
Mathematics..... Categories A, B or C  
Computer Science ..... Categories A, B or C

**Courses**

**BCMB144 BIOANALYTICAL CHEMISTRY/LECTURE, LABORATORY**

See Chemistry 144.

**BCMB264 BIOPHYSICAL CHEMISTRY/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 264.

**BCMB271/BCMB371 BIOCHEMISTRY I/LECTURE, LABORATORY**

See Biochemistry and Molecular Biology 271.

**BINF100 DECODING THE MYSTERY OF LIFE**

The successful completion of the Human Genome Project in June 2000 marked an astonishing moment of human history: the first time in the story of life on earth that a species has read its own recipe. But this book of secret code remains largely a mystery to us. Hidden with it lies tens of thousands of genes and millions of other sequences that constitute a treasure trove of secrets of life. It provides not only information for the cure of diseases, but also secret messages from the distant and recent past – from when we were single-celled creatures and from when we took up cultural habits. In this course students will study the mathematical models and the computational tasks involved in the sequencing of human genome, such as the shot-gun method and the sequence assembly problem. They will study how to compare DNA or Protein sequences to find disease genes, how to search for similar sequences to gain insight into the structure and functions of gene sequences, and how to recognize and find genes. Various computer models and algorithms to reconstruct our past, the evolutionary tree, based on the DNA sequences will also be introduced. Along the way discrete mathematical models (trees and graphs) and probabilistic concepts will be introduced, and a simple computer language will be employed to perform string searching and comparison. Many bioinformatics tools and web resources will be utilized for problem solving. Students will do projects suitable to their background and interest, and will be evaluated accordingly. No computer programming skill is required, and the only math prerequisite is some mathematical maturity on the precalculus level. Computer algorithms and mathematical concepts will be introduced gradually throughout the course, in connection with solutions of biological problems. Fulfills the Formal Analysis requirement. Mr. Chou/First-Year Seminar

**BINF101 INTRODUCTION TO BIOINFORMATICS/LECTURE, LABORATORY**

An introduction to the features of biological data, how those data are organized, and how existing data resources can be utilized efficiently by computer programs to solve a variety of biological problems. Covers database searching, sequence analysis of DNA and protein sequences, phylogenetic analysis, visualization and prediction of protein structures. The computer language Python will be used to facilitate the analysis. Three one-hour lectures and one 75-minute lab weekly. Prerequisites: BIOL101 (or AP Biology) and CSCI120 (or AP Computer Programming), or instructors' permission. Mr. Chou and Mr. Hibbett/Offered every year

**BIOL105 EVOLUTION/LECTURE, LABORATORY, DISCUSSION**

See Biology 105.

**BIOL109 MICROBIOLOGY/LECTURE, LABORATORY**

See Biology 109.

**BIOL118 GENETICS/LECTURE, LABORATORY**

See Biology 118.

**BIOL137 CELL BIOLOGY/LECTURE, LABORATORY**

See Biology 137.

**BIOL217 ECOLOGY OF INFECTIOUS DISEASE/SEMINAR**

See Biology 217.

**BIOL221 DEVELOPMENTAL BIOLOGY/ LECTURE, LABORATORY**

See Biology 221.

**BIOL231 RECOMBINANT DNA/LECTURE, LABORATORY**

See Biology 231.

**BIOL234 SIGNAL TRANSDUCTION/LECTURE**

See Biology 234.

**BIOL250 IMMUNOLOGY/LECTURE, DISCUSSION**

See Biology 250.

**BIOL254 MOLECULAR SYSTEMATICS AND EVOLUTION/LECTURE, LABORATORY**

See Biology 254.

**CHEM222 STATISTICAL THERMODYNAMICS/LECTURE**

See Chemistry 222.

**CHEM266 BIOMOLECULAR NMR/LECTURE**

See Chemistry 266.

**CHEM273 PRINCIPLES OF MOLECULAR MODELING/LECTURE**

See Chemistry 273.

**CHEM279 COMPUTER BIOCHEMISTRY/LECTURE**

See Chemistry 279.

**CSCI120 INTRODUCTION TO COMPUTING/LECTURE, LABORATORY**

See Computer Science 120.

**CSCI121 DATA STRUCTURES/LECTURE, LABORATORY**

See Computer Science 121.

**CSCI140 ASSEMBLY LANGUAGE AND COMPUTER ORGANIZATION/ LECTURE, LABORATORY**

See Computer Science 140.

**CSCI160 ALGORITHMS/LECTURE, DISCUSSION, LABORATORY**

See Computer Science 160.

**CSCI180 AUTOMATA THEORY/LECTURE, DISCUSSION**

See Computer Science 180.

**CSCI210 ARTIFICIAL INTELLIGENCE/ LECTURE, LABORATORY**

See Computer Science 210.

**CSCI215 OPERATING SYSTEMS/ LECTURE, LABORATORY**

See Computer Science 215.

**CSCI220 DATABASE MANAGEMENT AND SYSTEMS DESIGN/LECTURE**

See Computer Science 220.

**CSCI230 COMPILER DESIGN/LECTURE, LABORATORY**

See Computer Science 230.



**CSCI240 COMPUTER ARCHITECTURE/LECTURE**

See Computer Science 240.

**CSCI250 SOFTWARE ENGINEERING/SEMINAR**

See Computer Science 250.

**CSCI260 COMPUTER GRAPHICS**

See Computer Science 260.

**CSCI270 THEORY OF COMPUTATION/LECTURE**

See Computer Science 270.

**CSCI280 COMPUTER NETWORKS/LECTURE, LABORATORY**

See Computer Science 280.

**GEOG280 URBAN ECOLOGY: CITIES AS ECOSYSTEMS/LECTURE, DISCUSSION**

See Geography 280.

**MATH131 MULTIVARIATE CALCULUS/LECTURE**

See Mathematics 131.

**MATH172 INTRODUCTION TO MODERN ANALYSIS/ LECTURE**

See Mathematics 172.

**MATH212 NUMERICAL ANALYSIS/LECTURE, LABORATORY**

See Mathematics 212.

**MATH214 MODERN ANALYSIS/LECTURE**

See Mathematics 214.

**MATH216 FUNCTIONS OF A COMPLEX VARIABLE/ LECTURE**

See Mathematics 216.

**MATH217 PROBABILITY AND STATISTICS/LECTURE**

See Mathematics 217.

**MATH218 TOPICS IN STATISTICS/LECTURE**

See Mathematics 218.

**MATH225 MODERN ALGEBRA I/LECTURE**

See Mathematics 225.

**MATH228 TOPOLOGY/LECTURE**

See Mathematics 228.

**MATH244 DIFFERENTIAL EQUATIONS/LECTURE**

See Mathematics 244.

**COMPUTATIONAL SCIENCE****Program Faculty**

Jerry Breecher, Ph.D.

Daeg Brenner, Ph.D.

Harvey Gould, Ph.D.

Frederic Green, Ph.D.

Li Han, Ph.D.

David Hibbett, Ph.D.

Shuanghong Huo, Ph.D.

Todd Livdahl, Ph.D.

Natalia Sternberg, Ph.D.

**Program Overview**

The enormous progress in computational technology has generated a new methodology for learning and advancing the traditional sciences such as physics, chemistry and biology. Computational science combines the application of numerical methods, models and algorithms in the context of solving problems that are intractable by traditional

methods. It is distinct from computer science, which is the study of computers and computation and it is different from theory and experiment, the traditional forms of science, in that it seeks to gain understanding principally by the analysis of mathematical models.

The goal of the computational science concentration is to provide an opportunity for students to learn about the interplay between science and computation. The concentration is especially suitable for undergraduate students majoring in the sciences, mathematics or computer science, but students in other majors will be considered on an individualized basis. Students completing the computational science concentration would be able to enter graduate programs in their majors or newly created interdisciplinary graduate programs in computational science, and would be well prepared to go into industry.

**Requirements**

Because of the sequential nature of many of the requirements and the relatively large number of major requirements for students in the concentration, students are encouraged to plan early and carefully. A student's choice of advanced courses must be approved by the concentration faculty. The requirements vary depending on the student's major and interests, but all students are required to complete the following (or equivalent):

**Introductory Courses**

- CSCI120 Computer Programming I (or the equivalent)
- Two semesters of calculus (MATH120, 121 or MATH124, 125)
- Two semesters of physics or chemistry (PHYS110, 111 or PHYS120, 121 or CHEM101, 102)
- PHYS127 Computer Simulation Laboratory

**Advanced courses**

Four additional courses are required from the following list of recommended courses with the approval of the program faculty:

CSCI121 Computer Programming II  
 CSCI160 Data Structures and Algorithms  
 CSCI210 Artificial Intelligence  
 BIOL101,102 Intro Biology  
 BIOL254 Molecular Evolution and Systematics  
 BIOL280 Biostatistics and Computer Applications  
 CHEM102 Introductory Chemistry II  
 CHEM242 Nuclear Chemistry  
 CHEM264 Biophysical Chemistry  
 CHEM270 Quantum Chemistry  
 CHEM275 Protein Chemistry  
 MATH114 Discrete Mathematics  
 MATH212 Numerical Analysis  
 MATH217 Probability and Statistics

**Courses****BIOL101 INTRODUCTION TO BIOLOGY I/LECTURE, LABORATORY**

See Biology 101.

**BIOL254 MOLECULAR SYSTEMATICS AND EVOLUTION/LECTURE, LABORATORY**

See Biology 254.

**CHEM101 INTRODUCTORY CHEMISTRY I/LECTURE, LABORATORY**

See Chemistry 101.

**CHEM242 NUCLEAR SCIENCE/LECTURE**

See Chemistry 242.

**CHEM270 QUANTUM CHEMISTRY/LECTURE**

See Chemistry 270.

**CSCI120 INTRODUCTION TO COMPUTING/LECTURE, LABORATORY**

See Computer Science 120.

**CSCI121 DATA STRUCTURES/LECTURE, LABORATORY**

See Computer Science 121.

**CSCI160 ALGORITHMS/LECTURE, DISCUSSION, LABORATORY**

See Computer Science 160.

**CSCI210 ARTIFICIAL INTELLIGENCE/ LECTURE, LABORATORY**

See Computer Science 210.

**MATH114 DISCRETE MATHEMATICS/LECTURE**

See Mathematics 114.

**MATH120 CALCULUS I/LECTURE**

See Mathematics 120.

**MATH121 CALCULUS II/LECTURE**

See Mathematics 121.

**MATH124 HONORS CALCULUS I/LECTURE**

See Mathematics 124.

**MATH125 HONORS CALCULUS II/LECTURE**

See Mathematics 125.

**MATH212 NUMERICAL ANALYSIS/LECTURE, LABORATORY**

See Mathematics 212.

**MATH217 PROBABILITY AND STATISTICS/LECTURE**

See Mathematics 217.

**PHYS110 INTRODUCTORY PHYSICS – PART I/LECTURE, DISCUSSION, LABORATORY**

See Physics 110.

**PHYS111 INTRODUCTORY PHYSICS – PART II/LECTURE, DISCUSSION, LABORATORY**

See Physics 111.

**PHYS120 INTRODUCTORY PHYSICS – PART I/LECTURE, DISCUSSION, LABORATORY**

See Physics 120.

**PHYS121 INTRODUCTORY PHYSICS – PART II/LECTURE, DISCUSSION, LABORATORY**

See Physics 121.

**PHYS127 COMPUTER SIMULATION LABORATORY/ DISCUSSION, LABORATORY**

See Physics 127.

**ETHICS AND PUBLIC POLICY****Program Faculty**

Judith DeCew, Ph.D. – *Director (sabbatical 08-09)*

Gary Overvold, Ph.D. – *Acting Director*

Margarete Arndt, D.B.A.

Robert Boatright, Ph.D.

Halina Brown, Ph.D.

Brian Cook, Ph.D.

John L. Crawley, M.S., J.D.

Patrick Derr, Ph.D.

Susan Hanson, Ph.D.

Douglas Johnson, Ph.D.

Bruce London, Ph.D.

Deborah Merrill, Ph.D.

Mark Miller, Ph.D.

Edward J. Ottensmeyer, Ph.D.

Paul W. Posner, Ph.D.

Colin Polsky, Ph.D.

Robert Ross, Ph.D.

Nathaniel C. Seale, M.Ed.

Kristen Williams, Ph.D.

Walter Wright, Ph.D.

**Program Overview**

The interdisciplinary ethics and public policy concentration can be taken in conjunction with any major at Clark. This concentration is particularly recommended for students who intend to pursue professional or career interests in policy-related fields such as law, government, public administration or health care.

**Undergraduate Requirements**

The requirements for a concentration in ethics and public policy are designed to familiarize the student with the basic concepts and methods of both ethical analysis and policy analysis; to introduce the theoretical and methodological problems of both ethical analysis and policy analysis; and to ensure that the student engages in sustained analysis of particular ethical and public-policy issues at both an introductory and an advanced level.

At a minimum, the concentration in ethics and public policy requires six courses, distributed in the following manner:

**1. Two required courses in ethics**

At least one introductory course focused on the basic concepts and methods of ethical analysis. For example:

PHIL105 Personal Values

PHIL132 Social and Political Ethics

At least one advanced course focused on theoretical and methodological problems of ethical analysis. For example:

GOVT286 Advanced Topics in Contemporary Political Feminist Theories

PHIL220 Theories of Ethics

PHIL221 Social and Political Philosophy

PHIL228 Contemporary Moral Theory

**2. Two required courses in public-policy analysis**

At least one introductory course focused on the basic concepts and methods of policy analysis. For example:

ECON126 Public Policy Toward Business

EN175 Science, Decision Making and Uncertainty



GOVT070 Introduction to Comparative Politics  
 GOVT107 Research Methods  
 GOVT154 The Politics of Public Policy  
 GOVT155 Roots of Political Thought

At least one advanced course focused on theoretical and methodological problems of policy analysis. For example:

ECON215 Government Finance: Budget Policy in a Comparative Setting  
 EN212 Environmental Policy and Management  
 EN226 Environmental Hazards  
 EN250 Technology Assessment  
 EN261 Decision Analysis for Environmental Management  
 EN265 Tools for Quantitative Policy Analysis  
 GOVT202 Applications of Game Theory  
 GOVT213 Policy Analysis  
 GOVT253 Judicial Politics  
 GOVT255 U.S. Congress  
 GOVT281 Politics of Public Management  
 SOC243 Political Sociology  
 SOC246 Social Planning and Social Policy

### 3. Two required courses on applications and problems.

At least one introductory course focused on particular ethical and public-policy issues. For example:

EDUC155 Education and Social Policy  
 EN182 People, Politics and Pollution  
 GEOG105 The Keeping of Animals: Patterns of Use and Abuse  
 GOVT147 Normative World Orders  
 GOVT157 The Politics of Environmental Issues  
 ID108 World Population  
 ID125 Development Problems  
 PHIL130 Medical Ethics  
 PHIL131 Environmental Ethics  
 PHIL133 Business Ethics  
 SOC150 Class, Status and Power  
 SOC180 Aging and Society

At least one advanced course devoted to the intensive analysis of particular ethical and public-policy issues. For example:

ECON216 Tax Systems and Policies  
 ECON225 Health Policy  
 ECON126 Public Policy Toward Business  
 EN210 Environment and Society  
 EN226 Environmental Hazards: Theory, Models and Applications  
 EN251 Limits of Earth  
 EN282 Management of Environmental Pollutants  
 GEOG254 Urban Transportation: Problems and Prospects  
 GEOG258 Utopian Vision, Urban Reality  
 GOVT221 Urban Policy and Internships  
 GOVT250 National Security Policy Making in the United States  
 ID232 Population, Environment and Development  
 MGMT262 Business Ethics  
 PHIL270 Philosophy of Law  
 PHIL272 Advanced Issues in Medical Ethics  
 SOC241 Sociology of Medicine  
 SOC265 Social Movements: The Quest for Justice

## Graduate Program

The department offers course work leading to the doctor of philosophy in biology. The department has two foci for graduate emphasis: molecular and cell biology or ecology and evolution.

Students applying for admission must demonstrate adequate preparation in the basic sciences, an overall undergraduate record of B- or better, and satisfactory scores on the Graduate Record Examination (and TOEFL for International Students). Tuition scholarships and research and teaching assistantships are available to qualified students. Further information can be obtained from the department or our Web site at <http://www.clarku.edu/departments/biology/>.

## Courses

### EDUC155 EDUCATION AND SOCIAL POLICY/LECTURE, DISCUSSION

See Education 155.

### EN265 RISK ANALYSIS: POLICY AND METHODS/1/2 CREDIT/SEVEN WEEK MODULE

See Environmental Science 265.

### EPP105 PERSONAL VALUES/LECTURE, DISCUSSION

See Philosophy 105.

### EPP106 KEEPING OF ANIMALS: PATTERNS OF USE AND ABUSE/LECTURE, DISCUSSION

See Geography 105.

### EPP107 RESEARCH METHODS/LECTURE, DISCUSSION

See Government and International Relations 107.

### EPP108 PRIVACY PROTECTION IN LAW & ETHICS/FIRST-YEAR SEMINAR

See Philosophy 108.

### EPP130 MEDICAL ETHICS/LECTURE, DISCUSSION

See Philosophy 130.

### EPP147 WORLD ORDER AND GLOBALIZATION/ DISCUSSION

See Government and International Relations 147.

### EPP154 THE POLITICS OF PUBLIC POLICY IN THE UNITED STATES/LECTURE, DISCUSSION

See Government and International Relations 154.

### EPP155 ROOTS OF POLITICAL THOUGHT/LECTURE, DISCUSSION

See Government and International Relations 155.

### EPP180 AGING AND SOCIETY/LECTURE, DISCUSSION

See Sociology 180.

### EPP200 CLASS, STATUS AND POWER/VARIABLE FORMAT

See Sociology 200.

### EPP216 COMPARATIVE ENVIRONMENTAL POLITICS/LECTURE, DISCUSSION

See Government and International Relations 216.

### EPP220 THEORIES OF ETHICS/LECTURE, DISCUSSION

See Philosophy 220.

### EPP221 SOCIAL AND POLITICAL PHILOSOPHY/LECTURE, DISCUSSION

See Philosophy 221.

### EPP226 WHO FEARS WHAT AND WHY: SOCIAL THEORIES OF ENVIRONMENTAL RISKS AND HAZARDS/SEMINAR, LECTURE, DISCUSSION

See Geography 226.

### EPP232 POPULATION, ENVIRONMENT AND DEVELOPMENT/VARIABLE FORMAT

See Sociology 232.

### EPP241 SOCIOLOGY OF MEDICINE/LECTURE, DISCUSSION

See Sociology 241.

**EPP242 HUMAN RIGHTS AND TRANSITIONAL JUSTICE/LECTURE, DISCUSSION**  
See Sociology 242.

**EPP243 POLITICAL SOCIOLOGY/VARIABLE FORMAT**  
See Sociology 243.

**EPP250 U.S. NATIONAL SECURITY/LECTURE, DISCUSSION**  
See Government and International Relations 250.

**EPP258 UTOPIAN VISIONS, URBAN REALITIES: PLANNING CITIES FOR THE 21ST CENTURY/ LECTURE, DISCUSSION**  
See Geography 258.

**EPP262 BUSINESS ETHICS AND LAW**  
See Management 262.

**EPP265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE/ VARIABLE FORMAT**  
See Sociology 265.

**EPP270 PHILOSOPHY OF LAW/SEMINAR**  
See Philosophy 270.

**EPP283 HOUSING POLICIES AND POLITICS/SEMINAR**  
See Government and International Relations 282.

**GEOG025 SUBURBAN SPRAWL UNDER THE MICROSCOPE/LECTURE, DISCUSSION, FIRST YEAR SEMINAR**  
See Geography 125.

**GOVT070 INTRODUCTION TO COMPARATIVE POLITICS/ LECTURE, DISCUSSION**  
See Government and International Relations 070.

**GOVT147 WORLD ORDER AND GLOBALIZATION/ DISCUSSION**  
See Government and International Relations 147.

**GOVT154 THE POLITICS OF PUBLIC POLICY IN THE UNITED STATES/LECTURE, DISCUSSION**  
See Government and International Relations 154.

**GOVT157 THE POLITICS OF U.S. ENVIRONMENTAL ISSUES/LECTURE, DISCUSSION**  
See Government and International Relations 157.

**GOVT173 INTRODUCTION TO LATIN-AMERICAN POLITICS/LECTURE, DISCUSSION**  
See Government and International Relations 173.

**GOVT213 POLICY ANALYSIS/LECTURE, DISCUSSION**  
See Government and International Relations 213.

**GOVT216 COMPARATIVE ENVIRONMENTAL POLITICS/LECTURE, DISCUSSION**  
See Government and International Relations 216.

**GOVT221 URBAN POLICY/SEMINAR AND INTERNSHIP**  
See Government and International Relations 221.

**GOVT238 U.S. FOREIGN POLICY**  
See Government and International Relations 238.

**GOVT250 U.S. NATIONAL SECURITY/LECTURE, DISCUSSION**  
See Government and International Relations 250.

**GOVT253 U.S. JUDICIAL POLITICS/LECTURE, DISCUSSION**  
See Government and International Relations 253.

**GOVT255 THE POLITICS OF U.S. CONGRESS/LECTURE, DISCUSSION**  
See Government and International Relations 255.

**GOVT281 THE POLITICS OF POLICY IMPLEMENTATION/SEMINAR**  
See Government and International Relations 281.

**GOVT282 HOUSING POLICIES AND POLITICS/SEMINAR**  
See Government and International Relations 282.

**GOVT286 ADVANCED TOPICS IN COMPARATIVE POLITICS/SEMINAR**  
See Government and International Relations 286.

**ID125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT/LECTURE, DISCUSSION**  
See International Development and Social Change 125.

**IDCE352 TECHNOLOGY AND ENVIRONMENTAL ASSESSMENT SEMINAR**  
See Community Planning and Development 352.

**PHIL108 PRIVACY PROTECTION IN LAW & ETHICS/FIRST-YEAR SEMINAR**  
See Philosophy 108.

**PHIL131 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION**  
See Philosophy 131.

**PHIL132 SOCIAL AND POLITICAL ETHICS/LECTURE, DISCUSSION**  
See Philosophy 132.

**PHIL220 THEORIES OF ETHICS/LECTURE, DISCUSSION**  
See Philosophy 220.

**PHIL228 CONTEMPORARY MORAL THEORY/LECTURE, DISCUSSION**  
See Philosophy 228.

**PHIL272 ADVANCED ISSUES IN MEDICAL ETHICS/SEMINAR**  
See Philosophy 272.

**SOC264 ORGANIZED CRIME AND CORRUPTION**  
See Sociology 264.

**SOC285 SOCIAL POLICY, IMMIGRATION AND POVERTY/SEMINAR**  
See Sociology 285.

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## HOLOCAUST AND GENOCIDE STUDIES

### Program Faculty

Shelly Tenenbaum, Ph.D. - *Director*

Taner Akçam, Ph.D.

Paul Burke, Ph.D.

Debórah Dwork, Ph.D.

Jody Emel, Ph.D.

Everett Fox, Ph.D.

Thomas Kuehne, Ph.D.

Olga Litvak, Ph.D.

Srinivasan Sitaraman, Ph.D.

Valerie Sperling, Ph.D.

Jaan Valsiner, Ph.D.

Kristen Williams, Ph.D.

### Program Overview

The Holocaust and other acts of genocide are studied to enhance our understanding of the society from which we came, the society in which we live, and the society to which we currently are giving shape. By studying the Holocaust and genocide, we learn about collusion and resistance; about the hot violence of mass murder and the cold violence of the modern, bureaucratic machinery of death; and about suffering and adaptation to suffering. We learn how societies disintegrated, step by step, and how ordinary men, women, and children both participated in and were affected by this disintegration. We learn, in short, a tremendous amount about what we need to know to help us make the world a better place, wherever we might be.

The undergraduate concentration in Holocaust and Genocide Studies provides students with solid grounding in the history of the



Holocaust and other genocides. Students also take a series of courses in a variety of disciplines to ensure a critical, analytical and sophisticated understanding of the various facets of these atrocities. The undergraduate program of study encompasses history, sociology, government, geography, and psychology.

## Undergraduate Requirements

The Holocaust and Genocide Studies concentration may be pursued in conjunction with any major. Students are required to take seven courses that include:

Two of the following three courses: SOC130 Genocide, GOVT214 Mass Murder and Genocide Under Communism, HIST175 Holocaust: Agency and Action

- Two courses from section A
- One course from section B
- One course from section C
- A capstone seminar

The seven courses must be taken from at least three different departments. At least two of the total seven courses must be at the 200 level. The program faculty members will serve as advisors to students, providing guidance in selecting courses and developing a capstone experience.

### Section A

Two out of this list are required:

CLAS262 Jews and Christians in the Ancient World  
GOVT136 Sub-Saharan Africa  
HIST115 Authority and Democracy: The History of Modern Central Europe  
HIST135 History of Armenia  
HIST142 Central Europe in the Long 19th Century  
HIST143 War and Peace: Central Europe, 1914-2003  
HIST153 Europe in the Age of Extremes  
HIST234 Racial Thought and Body Politics in Modern Europe  
HIST253 20th-Century Europe  
HIST255 Jews in Modern Europe: From Expulsion to Emancipation  
HIST259 Modern Germany  
JS130 Suffering and Evil in Jewish Tradition  
JS174 The Jewish Experience  
JS276 Modern Jewish History and Thought

### Section B

One out of this list is required:

HIST175 Holocaust: Agency and Action \*  
HIST165 Nazi Germany  
HIST236 Gender, War and Holocaust Germany  
HIST237 Holocaust Perpetrators  
HIST260 Rescue and Resistance  
HIST261 Jewish Children in Nazi Europe  
HIST265 Life and Death in the City: Occupied Europe, 1939-1945  
HIST266 Refugees  
HIST268 Holocaust Issues and Controversies  
HIST273 Life Under Occupation

\*Can fulfill Section B requirements only if not taken as one of the three core courses.

### Section C

One out of this list is required:

GEOG090/197 Native Americans and Natural Resources  
GOVT093 International Human Rights  
GOVT146 United Nations and International Politics  
GOVT214 Mass Murder and Genocide Under Communism \*\*  
GOVT240 Human Rights and International Politics  
GOVT278 Holocaust and Genocide in Comparative Perspective  
GOVT289 Advanced Topics in International Politics:  
International Law and Human Rights  
GOVT289 Advanced Topics in International Politics: Nationalism, Ethnic Conflict, and International Security  
HIST230 The Armenian Genocide  
HIST247 The Western Powers and the Armenian Genocide  
SOC 30 Genocide \*\*  
PSYC264 Cultural and Social Psychology of Genocides  
\*\*Can fulfill Section C requirements only if not taken as one of the three core courses.

### Capstone Courses

The capstone requirement may be fulfilled through a directed-research project or seminar. Students must receive permission from the instructor to count a seminar as the capstone experience. Examples of seminars that fulfill the capstone requirement are:

GOVT278 Holocaust and Genocide in Comparative Perspective  
GOVT289 Advanced Topics in International Relations:  
International Law and Human Rights  
GOVT289 Advanced Topics in International Relations:  
Nationalism, Ethnic Conflict, and International Security  
HIST234 Racial Thought and Body Politics in Modern Europe  
HIST236 Gender, War and Holocaust  
HIST247 The Western Powers and the Armenian Genocide  
HIST260 Rescue and Resistance  
HIST261 Jewish Children in Nazi Europe  
HIST265 Life and Death in the City: Occupied Europe, 1939-1945  
HIST266 Refugees  
HIST268 Holocaust Issues and Controversies  
HIST273 Life Under Occupation  
PSYC264 Cultural and Social Psychology of Genocides

### Graduate Program

The department offers programs leading to the degrees of master of arts and doctor of philosophy with specialization in various fields of history. Emphasis is placed on tailoring programs to fit the specific needs and desires of the graduate student. To facilitate this goal, a committee of interested faculty works with each student to advise and review his/her progress in research work and course requirements (six courses for Ph.D. students). Up to one year's equivalent of teaching apprenticeship will be required of all candidates for advanced degrees. In addition to formal course work, all students must pass qualifying examinations and submit and defend a research thesis.

Ph.D. candidates must pass preliminary examinations and meet the department language requirement. For further details, students should consult the appropriate departmental publications. Graduate scholarships, teaching assistantships and research fellowships are available.

## Courses

### **GEOG197 NATIVE AMERICANS AND NATURAL RESOURCES**

See Geography 197.

### **GOVT136 SUB-SAHARAN AFRICA: ISSUES AND PROBLEMS/LECTURE, DISCUSSION**

See Government and International Relations 136.

### **GOVT146 THE UNITED NATIONS AND INTERNATIONAL POLITICS**

See Government and International Relations 146.

### **GOVT278 GENOCIDE IN COMPARATIVE PERSPECTIVE**

See Government and International Relations 278.

### **HGS115 AUTHORITY AND DEMOCRACY: THE HISTORY OF MODERN CENTRAL EUROPE/LECTURE, DISCUSSION**

See History 115.

### **HGS130 GENOCIDE**

See Sociology 130.

### **HGS131 SUFFERING AND EVIL IN JEWISH TRADITION/LECTURE, DISCUSSION**

See Jewish Studies 130.

### **HGS135 HISTORY OF ARMENIA/LECTURE, DISCUSSION**

See History 135.

### **HGS136 SUB-SAHARAN AFRICA: ISSUES AND PROBLEMS/LECTURE, DISCUSSION**

See Government and International Relations 136.

### **HGS142 CENTRAL EUROPE IN THE LONG 19TH CENTURY (1756-1914) LECTURE/DISCUSSION**

See History 142.

### **HGS153 EUROPE IN THE AGE OF EXTREMES: THE 20TH CENTURY**

See History 153.

### **HGS174 THE JEWISH EXPERIENCE/LECTURE, DISCUSSION**

See Jewish Studies 174.

### **HGS175 HOLOCAUST: AGENCY AND ACTION LECTURE, DISCUSSION**

See History 175.

### **HGS214 MASS MURDER AND GENOCIDE UNDER COMMUNISM/LECTURE, DISCUSSION**

See Government and International Relations 214.

### **HGS230 HISTORY OF THE ARMENIAN GENOCIDE/SEMINAR**

See History 230.

### **HGS234 RACIAL THOUGHT AND BODY POLITICS IN MODERN EUROPE (1500-2000)/SEMINAR**

See History 234.

### **HGS236 GENDER, WAR AND GENOCIDE IN 20TH CENTURY EUROPE/SEMINAR**

See History 236.

### **HGS237 THE HOLOCAUST PERPETRATORS**

See History 237.

### **HGS240 HUMAN RIGHTS AND INTERNATIONAL POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 240.

### **HGS247 THE WESTERN POWERS AND THE ARMENIAN GENOCIDE**

See History 247.

### **HGS253 20TH-CENTURY EUROPE/LECTURE, DISCUSSION**

See History 253.

### **HGS259 MODERN GERMANY/LECTURE, DISCUSSION**

See History 259.

### **HGS260 RESCUE AND RESISTANCE DURING THE HOLOCAUST/SEMINAR**

See History 260.

### **HGS261 JEWISH CHILDREN IN NAZI-OCCUPIED EUROPE/SEMINAR**

See History 261.

### **HGS262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD**

See Classics 262.

### **HGS265 LIFE AND DEATH IN THE CITY: OCCUPIED EUROPE, 1939-1945/SEMINAR**

See History 265.

### **HGS266 REFUGEES/SEMINAR**

See History 266.

### **HGS277 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY/CAPSTONE SEMINAR**

See Psychology 276.

### **HGS278 GENOCIDE IN COMPARATIVE PERSPECTIVE**

See Government and International Relations 278.

### **HGS289 ADVANCED TOPICS IN INTERNATIONAL RELATIONS/SEMINAR**

See Government and International Relations 289.

### **HGS368 SPECIAL TOPICS: MASS MURDER AND MEMORY/SEMINAR**

See History 268.

### **HIST042 NAZI GERMANY: RISE AND FALL/FIRST-YEAR SEMINAR**

See History 042.

### **HIST143 WAR AND PEACE: CENTRAL EUROPE, 1914-2003**

See History 143.

### **HIST165 NAZI GERMANY AND THE HOLOCAUST/LECTURE, DISCUSSION**

See History 165.

### **HIST237 THE HOLOCAUST PERPETRATORS**

See History 237.

### **HIST247 THE WESTERN POWERS AND THE ARMENIAN GENOCIDE**

See History 247.

### **HIST255 JEWS IN MODERN EUROPE: FROM EXPULSION TO EMANCIPATION/LECTURE, DISCUSSION**

See History 255.

### **HIST273 LIFE UNDER OCCUPATION/SEMINAR**

See History 273.

### **HIST276 MODERN JEWISH HISTORY AND THOUGHT/LECTURE, DISCUSSION**

See History 276.

### **PSYC276 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY/CAPSTONE SEMINAR**

See Psychology 276.

### **PSYC315 SOCIAL AND CULTURAL PSYCHOLOGY OF GENOCIDES/GRADUATE SEMINAR**

See Psychology 315.



## JEWISH STUDIES

### Program Faculty

Debórah Dwork, Ph.D.  
Everett Fox, Ph.D.  
Olga Litvak, Ph.D.  
Shelly Tenenbaum, Ph.D.

### Program Overview

Jewish studies at Clark is designed to introduce the student to the major historical and religious trends in Jewish civilization since its inception in antiquity. The courses reflect the broad range of developments both encountered and fostered by the Jewish people including their contact with other world civilizations, classical literature, social and religious institutions, as well as their interaction with the modern world. In these courses, Jews and Judaism are studied both in their own internal context and as paradigms for wider trends in history and religion.

### Requirements

All students must take JS174 The Jewish Experience, a survey of Jewish history and thought. In addition to JS174, students must take six courses of which at least two must be in the Classical area and at least two in the Modern area. One of the six courses must be an integrating capstone project (internship, independent study, or advanced seminar with the approval of the program director). Two courses in Hebrew language may also count toward concentration.

#### CLASSICAL

CLAS262 Jews and Christians in the Ancient World  
CLAS267 The Religious Experience in the Ancient World  
JS117 Introduction to the Hebrew Bible I: Narrative and Law  
JS118 Introduction to the Hebrew Bible II: Prophecy and Poetry  
JS121 Laws and Legends, Maxims and Mystical Tales  
JS123 The Midrashic Tradition  
JS130 Suffering and Evil in Jewish Tradition  
JS150 Jerusalem in History and Imagination

#### MODERN

GOVT245 Americans, Israelis and Arabs  
HIST175 The History of the Holocaust to 1933  
HIST276 Modern Jewish History and Thought  
JS210 Arab-Israeli Conflict  
JS277 The History of Zionism and Israel  
SOC203 American Jewish Life  
SOC258 Women in Jewish Culture (also Classical)

### Courses

**CLAS267 RELIGIOUS EXPERIENCE IN THE ANCIENT WORLD/LECTURE, DISCUSSION**

See Classics 267.

**ENG237 ASIANS AND JEWS IN THE UNITED STATES/LECTURE, DISCUSSION**

See English 237.

**HEBR101 ELEMENTARY HEBREW I/ LECTURE, DISCUSSION**

See Hebrew 101.

**HEBR102 ELEMENTARY HEBREW II/LECTURE**

See Hebrew 102.

**HEBR103 INTERMEDIATE HEBREW/LECTURE, DISCUSSION**

See Hebrew 103.

**HEBR104 INTERMEDIATE-ADVANCED HEBREW/LECTURE, DISCUSSION**

See Hebrew 104.

**HGS212 EASTERN EUROPEAN JEWISH HISTORY AND CULTURE BETWEEN THE TWO WORLD WARS**

Staff. Offered every year.

**HIST152 JEWS IN EARLY MODERN EUROPE AND COLONIAL AMERICA/LECTURE, DISCUSSION**

See History 152.

**HIST175 HOLOCAUST: AGENCY AND ACTION LECTURE, DISCUSSION**

See History 175.

**HIST255 JEWS IN MODERN EUROPE: FROM EXPULSION TO EMANCIPATION/LECTURE, DISCUSSION**

See History 255.

**HIST270 JEWISH RESPONSES TO MODERNITY: THE ENLIGHTENMENT AND ITS CRITICS/SEMINAR**

See History 270.

**HIST276 MODERN JEWISH HISTORY AND THOUGHT/LECTURE, DISCUSSION**

See History 276.

**JS117 READING THE NARRATIVES OF THE HEBREW BIBLE/FIRST-YEAR SEMINAR**

The first half of the Hebrew Bible-the books of Genesis through Kings-is a central text of Western culture. But how are these texts to be read? As history, myth, religious program, foundation of Judaism, foundation of Christianity? Using the tools of comparative ancient Near eastern languages and cultures, the history of religion, literary analysis, and folklore, we will explore the Bible's many faces, and try to show how the answer to the question is close to "all of the above." We will also view the texts through the window of later interpretation among Jews and Christians, and see how many generations came to view themselves and their own story through the ones presented in the Bible. Fulfills the Historical Perspective requirement. Mr. Fox/Offered every year

**JS118 INTRODUCTION TO THE HEBREW BIBLE II: PROPHECY AND POETRY/LECTURE, DISCUSSION**

A close reading (in English) of the poetic portions of the Hebrew Bible, from Isaiah through the Writings. The prophetic revolution in Israel is evaluated: its roots, as well as its impact on its own society and later social and cultural criticism in the West. The artistry of biblical poetry is analyzed, along with the thematics of piety, despair, resignation and eroticism that are found in such books as the Psalms and the Song of Songs. Finally, books of a more philosophical bent (Ecclesiastes, Job), which question the earlier assumptions of biblical faith, are read. As in JS117, emphasis is placed in the influence of the Bible on later thinking in the West. Mr. Fox/Offered every year

**JS121 LAWS AND LEGENDS, MAXIMS AND MYSTICAL TALES**

Introduces (in English) major texts of post-Biblical Judaism. Beginning with the Roman period, the texts cover such diverse areas as folklore, ethics, legal rules and mysticism. The sources involve ancient answers to questions of everyday living, physical and spiritual survival, and celebration; we also trace the reformulation of such questions down to the eve of the modern period. Stresses how the texts work, centering on the role of commentary as a classic form of Jewish discourse and on an active style of group learning. Mr. Fox/Offered every other year

**JS123 THE MIDRASHIC TRADITION/LECTURE, DISCUSSION**

See Jewish Studies 123.

**JS130 SUFFERING AND EVIL IN JEWISH TRADITION/LECTURE, DISCUSSION**

A central problem in Western religious thought is theodicy: how to explain the existence of suffering and evil in a world ruled by a supposedly benevolent God. Examines a variety of Jewish sources on the problem, which propose a wide variety of answers. Central are the biblical book of Job and its interpretations through the centuries; at the other end of history, responses to the Holocaust are considered. Mr. Fox/Offered every other year

**JS150 JERUSALEM IN HISTORY AND IMAGINATION/LECTURE, DISCUSSION**

Surveys fortunes and forms of Jerusalem from Bronze Age to present day. Examines the political and religious visions for the city (pagan, Jewish, Christian, Muslim) and the secular and religious aspirations of these groups as they have become inextricably entangled with the history of the city. Mr. Burke and Mr. Fox/Offered periodically

**JS174 THE JEWISH EXPERIENCE/LECTURE, DISCUSSION**

Surveys history of the Jewish community and the development of Judaism from the era of Alexander the Great (c. 325 B.C.E.) to the present. Examines the major political, religious, social and economic trends of each period as they affected the Jewish community and the development of Judaism. Emphasizes elements of change and continuity, as well as interaction of the Jewish community with the larger culture and community. Fulfills the Historical Perspective. Mr. Fox/Offered every year

**JS203 AMERICAN JEWISH LIFE/VARIABLE FORMAT**

See Sociology 203.

**JS258 WOMEN IN JEWISH CULTURE/LECTURE, DISCUSSION**

See Sociology 258.

**JS262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD**

See Classics 262.

**LAW AND SOCIETY****Program Faculty**

Judith DeCew, Ph.D.

Patricia Ewick, Ph.D.

Mark Miller, Ph.D.

**Program Overview**

The interdisciplinary law and society concentration explores questions about the impact and effects of law, legal institutions and legal actors on society from a variety of perspectives. It also explores the identification and analysis of legal arguments in a variety of contexts. Some of the courses also help the students develop their oral advocacy skills. The concentration can be taken in conjunction with any major at Clark. Generally, 200-level courses are not appropriate for first-year students.

**Undergraduate Requirements**

1. Students must take a minimum of six courses to fulfill the concentration.
2. The six courses must come from at least three different departments.
3. At least two of the courses must be at the 200 level.

4. At least one of the six courses must be a core course, which should be taken as early as possible in the student's academic program:
  - GOVT050 Introduction to American Government
  - PHIL132 Social and Political Ethics
  - SOC262 Law and Society
5. One of the six courses must be a capstone experience (a seminar, an internship or a directed-research project):
  - PHIL270 Seminar: Philosophy of Law
  - SOC272 (LAS277) Punishment, Politics and Culture
  - GOVT291 Seminar: Lawyers and American Politics
  - GOVT293 Seminar: Constitutional Democracy
  - GOVT296 Seminar: Con Law of Pres-Congress Relations
  - Legal Internships in a variety of academic departments
  - Directed research or special projects in a variety of academic departments
6. No more than two of the courses can also be counted for the student's major or minor requirements, or for another concentration.

**Courses****ECON126 PUBLIC POLICY TOWARD BUSINESS/LECTURE, DISCUSSION**

See Economics 126.

**ECON157 THE ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT/LECTURE**

See Economics 157.

**ECON222 LABOR/LECTURE, DISCUSSION**

See Economics 222.

**ECON257 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS/LECTURE, DISCUSSION**

See Economics 257.

**GOVT190 LEADERSHIP IN AMERICAN POLITICS**

See Government and International Relations 190.

**GOVT257 COMPARATIVE COURTS AND LAW/LECTURE, DISCUSSION**

See Government and International Relations 257.

**GOVT271 THE AMERICAN JURY SYSTEM/LECTURE, DISCUSSION**

See Government and International Relations 271.

**GOVT274 THE SUPREME COURT IN AMERICAN SOCIETY/LECTURE, DISCUSSION**

See Government and International Relations 274.

**GOVT279 OBSCENITY LAW AND RELATED TOPICS**

See Government and International Relations 279.

**GOVT289 ADVANCED TOPICS IN INTERNATIONAL RELATIONS/SEMINAR**

See Government and International Relations 289.

**HIST070 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM ANCIENT HEBREWS THROUGH THE RENAISSANCE AND REFORMATION/LECTURE, DISCUSSION**

See History 070.

**HIST201 ERA OF THE AMERICAN REVOLUTION/ LECTURE, DISCUSSION**

See History 201.

**HIST202 THE EARLY AMERICAN REPUBLIC/LECTURE, DISCUSSION**

See History 202.

**HIST212 HISTORY OF SEXUALITY: 1750 TO THE PRESENT/LECTURE, DISCUSSION**

See History 212.

**HIST214 THE AMERICAN CIVIL WAR/LECTURE, DISCUSSION**

See History 214.



**HIST217 RECONSTRUCTION: AMERICA AFTER THE CIVIL WAR, 1865-1877/SEMINAR**

See History 217.

**HIST223 THE CIVIL RIGHTS MOVEMENT/LECTURE, DISCUSSION**

See History 223.

**LAS038 TRIAL ADVOCACY**

This course teaches the fundamentals of the trial of a case in a court of law. The students are expected to prepare and deliver oral presentations, simulated openings, closings and witness examinations during the semester. The culmination of the course is a series of trials in which the students are the attorneys and witnesses. This course is a prerequisite for participating on Clark's Intercollegiate Mock Trial Team.

**LAS039 ADVANCED TRIAL ADVOCACY, I AND II**

This course involves the participation of two teams of Clark University students in the American Mock Trial Association tournaments. The tournaments require each team to prepare and try four cases against other colleges and universities using students as attorneys and witnesses. LAS038 is a prerequisite to this class.

**LAS050 INTRODUCTION TO AMERICAN GOVERNMENT/LECTURE, DISCUSSION**

See Government and International Relations 050.

**LAS146 THE UNITED NATIONS AND INTERNATIONAL POLITICS**

See Government and International Relations 146.

**LAS196 STRATEGIC SPEAKING/WORKSHOP**

See English 196.

**LAS202 THE EARLY AMERICAN REPUBLIC/LECTURE, DISCUSSION**

See History 202.

**LAS212 HISTORY OF SEXUALITY: 1750 TO THE PRESENT/LECTURE, DISCUSSION**

See History 212.

**LAS214 THE AMERICAN CIVIL WAR/LECTURE, DISCUSSION**

See History 214.

**LAS221 SOCIAL AND POLITICAL PHILOSOPHY/LECTURE, DISCUSSION**

See Philosophy 221.

**LAS242 HUMAN RIGHTS AND TRANSITIONAL JUSTICE/LECTURE, DISCUSSION**

See Sociology 242.

**LAS253 U.S. JUDICIAL POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 253.

**LAS257 LANGUAGE AT ISSUE/SEMINAR**

See English 257.

**LAS261 BUSINESS ETHICS AND LAW**

See Management 262.

**LAS262 LAW AND SOCIETY/LECTURE, DISCUSSION**

See Sociology 262.

**LAS263 DEVIANCE/VARIABLE FORMAT**

See Sociology 263.

**LAS264 ORGANIZED CRIME AND CORRUPTION**

See Sociology 264.

**LAS270 PHILOSOPHY OF LAW/SEMINAR**

See Philosophy 270.

**LAS271 THE AMERICAN JURY SYSTEM/LECTURE, DISCUSSION**

See Law and Society 271.

**LAS272 U.S. CONSTITUTIONAL LAW: CIVIL LIBERTIES/LECTURE, DISCUSSION**

See Government and International Relations 272.

**LAS273 U.S. CONSTITUTIONAL LAW: GOVERNMENTAL POWERS/LECTURE, DISCUSSION**

See Government and International Relations 273.

**LAS276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION**

See Government and International Relations 276.

**LAS289 ADVANCED TOPICS IN INTERNATIONAL RELATIONS/SEMINAR**

See Government and International Relations 289.

**LAS291 LAWYERS AND POLITICS/SEMINAR**

See Government and International Relations 291.

**LAS293 CONSTITUTIONAL DEMOCRACY/SEMINAR**

See Government and International Relations 293.

**MGMT178 BUSINESS LAW/LECTURE, DISCUSSION**

Examines the legal framework in which U.S. businesses operate. Emphasizes areas of the law such as contract negotiation and provisions, the Uniform Commercial Code, government regulations, consumer protection, and tort liability. Provides students with an understanding of the business and legal environments that will guide future management decisions and inquiry. Not open to first-year students. Staff/Offered every semester

**PHIL107 LOGIC AND LEGAL ANALYSIS/LECTURE, DISCUSSION**

See Philosophy 107.

**PHIL108 PRIVACY PROTECTION IN LAW & ETHICS/FIRST-YEAR SEMINAR**

See Philosophy 108.

**PHIL132 SOCIAL AND POLITICAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 132.

**SOC264 ORGANIZED CRIME AND CORRUPTION**

See Sociology 264.

**SOC272 PUNISHMENT, POLITICS AND CULTURE**

See Sociology 272.

**PEACE STUDIES**

**Program Faculty**

Joseph de Rivera, Ph.D., *Director*

Patrick Derr, Ph.D.

Debórah Dwork, Ph.D.

William Fisher, Ph.D.

Janette T. Greenwood, Ph.D.

George Lane, M.A.

Douglas Little, Ph.D.

Paul W. Posner, Ph.D.

Dianne Rocheleau, Ph.D.

Robert Ross, Ph.D.

Valerie Sperling, Ph.D.

Kristen Williams, Ph.D.

Walter Wright, Ph.D.

**Program Overview**

The Peace Studies program is concerned with analyzing alternative ways that may be used to transform individual behavior, national policy and human institutions in order to promote peace and justice in the world. The program promotes discussion and study on issues of conflict and its management, within the lives of individuals, societies and the world at large. It sponsors research on meditation, mediation, negotiation and ways to reduce violence, build diverse communities and use nonviolent action to defend human rights and promote justice.

Undergraduates may concentrate in peace studies to complement any major. Students may also design a major in peace studies via the University's self-designed major. The concentration draws together the knowledge of several disciplines in the context of the search for peace, while enhancing students' critical-thinking skills and awareness of the connections between local and global issues. Departments and programs represented in peace studies include government, history, international development and social change, philosophy, psychology and sociology.

Course work, research and internships enable students to apply their theoretical understanding of the issues of peace to practical situations. The concentrator needs to have an active understanding of the relationship between the three spheres of peace: personal, societal and global. These are interlocked, each influencing the others in cyclical patterns. Conflicts often involve links between the hearts of individuals, the structures of societies, and global competition and cooperation. Hence, the concentrator should be engaged in understanding how personal development and societal and global structure can transform conflicts. Students who complete a concentration in peace studies are prepared to enter careers and graduate study in such fields as public policy, international development, labor relations, environment and ecology, and international relations. They are prepared to take an active role in shaping constructive policies in the public sector and civil society.

The Peace Studies Office provides information on internships, jobs and careers; a library; and a computer link to international conferences and bulletin boards.

## Undergraduate Requirements

The peace studies concentration requires six courses. Students take PSTD101 An Introduction to Peace Studies and the Psychology of Peace, and at least one course from each of three clusters of courses dealing with issues of negotiation and political influence, nonviolent action, and strength and conflict. Students select a fifth course from any of the three clusters. Finally, the sixth course, which involves at least one of the skills of peacemaking and enables the student to examine personal transformation, is chosen from those listed under the category "Internships, Directed Readings, Research and Capstone Courses." (At least two courses should be at the 200 level; two may be from the student's major.)

### Courses

The following is a list of Clark's peace-studies offerings. Students may petition the Peace Studies Committee to receive concentration credit for courses other than those listed below, including courses that are available through the Colleges of Worcester Consortium. More information may be obtained from the Peace Studies Office, 201 Jonas Clark, (508) 793-7663.

PSTD101 An Introduction to Peace Studies and the Psychology of Peace

### Nonviolent Action Courses

GOVT173 Introduction to Latin-American Politics  
GOVT177 Transitions to Democracy  
GOVT251 Social Movements and Interest Groups  
HIST233 The Civil Rights Movement  
ID131 Local Action, Global Change  
ID253 Social Movements, Globalization and the State  
SOC265 Social Movements: Quest for Justice

### Negotiation and Political Influence Courses

ID266 Principles of Negotiation and Mediation: An Overview of Conflict Resolution Approaches  
GOVT080 Model United Nations Program  
GOVT154 The Politics of Public Policy in the United States  
GOVT205 Campaigns and Elections  
GOVT211 International Cooperation  
GOVT251 Social Movements and Interest Groups  
GOVT255 The Politics of Congress  
SOC243 Political Sociology

### Strength and Conflict Courses

GOVT070 Introduction to Comparative Politics  
GOVT117 Revolution and Political Violence  
GOVT210 Violence: The Case of the Middle East  
GOVT245 Americans, Israelis and Arabs  
GOVT250 U.S. National Security  
GOVT290 Inter-American Relations  
HIST230 Armenian Genocide  
HIST259 Modern Germany  
HIST260 Rescue and Resistance during the Holocaust  
HIST287 Advanced Topics in International Relations  
SOC130 Genocide

### Internships, Directed Readings, Research and Capstone Courses

PSYC246 Psychology of Peacemaking  
PSTD290 Special Topics in Peace Studies  
PSTD298 Directed Readings in Peace Studies  
PSTD299 Peace Studies Internship

### Courses

**GOVT117 REVOLUTION AND POLITICAL VIOLENCE/LECTURE, DISCUSSION**  
See Government and International Relations 117.

**GOVT146 THE UNITED NATIONS AND INTERNATIONAL POLITICS**  
See Government and International Relations 146.

**GOVT177 TRANSITIONS TO DEMOCRACY/LECTURE, DISCUSSION**  
See Government and International Relations 177.

**GOVT205 U.S. CAMPAIGNS AND ELECTIONS/LECTURE, DISCUSSION**  
See Government and International Relations 205.

**GOVT211 INTERNATIONAL COOPERATION**  
See Government and International Relations 211.

**GOVT251 U.S. SOCIAL MOVEMENTS AND INTEREST GROUPS/LECTURE, DISCUSSION**  
See Government and International Relations 251.

**GOVT255 THE POLITICS OF U.S. CONGRESS/LECTURE, DISCUSSION**  
See Government and International Relations 255.

**GOVT290 INTER-AMERICAN RELATIONS/SEMINAR**  
See Government and International Relations 290.

**HIST230 HISTORY OF THE ARMENIAN GENOCIDE/SEMINAR**  
See History 230.

**HIST259 MODERN GERMANY/LECTURE, DISCUSSION**  
See History 259.



**HIST260 RESCUE AND RESISTANCE DURING THE HOLOCAUST/SEMINAR**

See History 260.

**PHIL130 MEDICAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 130.

**PSTD070 INTRODUCTION TO COMPARATIVE POLITICS/ LECTURE, DISCUSSION**

See Government and International Relations 070.

**PSTD080 MODEL UNITED NATIONS PROGRAM**

See Government and International Relations 080.

**PSTD101 INTRODUCTION TO PEACE STUDIES/LECTURE, DISCUSSION**

Can we manage the conflicts in our personal lives, our society, and our world, so they result in development and justice rather than oppression and destruction? We consider four paths towards peace: strength, negotiation, nonviolent struggle, and personal transformation. Students are asked to investigate these paths and develop their own stance towards achieving peace. Mr. DeRivera/Offered every year

**PSTD117 REVOLUTION AND POLITICAL VIOLENCE/LECTURE, DISCUSSION**

See Government and International Relations 117.

**PSTD130 GENOCIDE**

See Sociology 130.

**PSTD131 LOCAL ACTION, GLOBAL CHANGE/LECTURE, DISCUSSION**

See International Development and Social Change 131.

**PSTD135 MEDICAL ETHICS/LECTURE, DISCUSSION**

See Philosophy 130.

**PSTD146 THE UNITED NATIONS AND INTERNATIONAL POLITICS**

See Government and International Relations 146.

**PSTD154 THE POLITICS OF PUBLIC POLICY IN THE UNITED STATES/LECTURE, DISCUSSION**

See Government and International Relations 154.

**PSTD157 THE POLITICS OF U.S. ENVIRONMENTAL ISSUES/LECTURE, DISCUSSION**

See Government and International Relations 157.

**PSTD173 INTRODUCTION TO LATIN-AMERICAN POLITICS/LECTURE, DISCUSSION**

See Government and International Relations 173.

**PSTD223 THE CIVIL RIGHTS MOVEMENT/LECTURE, DISCUSSION**

See History 223.

**PSTD238 U.S. FOREIGN POLICY/LECTURE, DISCUSSION**

Analyzes America's rise to globalism from World War II through the Cold War and beyond, focusing on key policymakers like FDR, JFK, Henry Kissinger and Bill Clinton. Topics include the atomic bomb, the CIA, the Vietnam War and the Arab-Israeli conflict. Special emphasis on the dilemmas of the 1990s—the Gulf War, Bosnia and economic rivalry with Japan. Formerly titled U.S. Foreign Relations since 1914. Staff/Offered every other year

**PSTD240 PSYCHOLOGY OF NONVIOLENCE AND SOCIAL STRUGGLE**

This course considers the growing literature on personal and societal nonviolence. The first third of the course examines ideas about nonviolent communication, empathy, nonviolence in American literature, and the pragmatic investigation of historical nonviolent social struggles. This course will also consider the strategy of nonviolence, current nonviolent actions, and how nonviolent theory might be applied in contemporary struggles. Mr. de Rivera/Offered

**PSTD246 PSYCHOLOGY OF PEACEMAKING/FIRST SEMINAR**

See Psychology 246.

**PSTD250 U.S. NATIONAL SECURITY/LECTURE, DISCUSSION**

See Government and International Relations 250.

**PSTD252 RACE AND AMERICAN SOCIETY/LECTURE, DISCUSSION**

See Sociology 252.

**PSTD253 SOCIAL MOVEMENTS, GLOBALIZATION AND THE STATE/LECTURE, DISCUSSION**

See International Development and Social Change 253.

**PSTD262 LAW AND SOCIETY/LECTURE, DISCUSSION**

See Sociology 262.

**PSTD265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE/ VARIABLE FORMAT**

See Sociology 265.

**PSTD266 PRINCIPALS OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES**

See International Development and Social Change 266.

**PSTD268 PEACE AND WAR**

Through an examination and analysis of the various theories in the field of international relations as related to the origins, duration, and conclusion of wars. Looking at both historical and contemporary cases, we will assess the factors that contribute to the outbreak of war (i.e., nationalism, territory, economics and security dilemmas) as well as the emergence of peace (i.e., international institutions, alliances and the balance of power). The course concludes with an exploration of the challenges for preventing future wars and enhancing the possibility of peace. Ms. Williams/Offered periodically

**PSTD285 SPECIAL TOPICS IN PEACE STUDIES/SEMINAR**

Staff/Offered periodically

**PSTD290 PEACE RESEARCH**

Students in this course conduct independent research that may contribute to building cultures of peace.

**PSTD298 DIRECTED READINGS IN PEACE STUDIES****PSTD299 PEACE STUDIES INTERNSHIP****SOC243 POLITICAL SOCIOLOGY/VARIABLE FORMAT**

See Sociology 243.

## RACE AND ETHNIC RELATIONS

### Program Faculty

María Acosta Cruz, Ph.D.  
Parminder Bhachu, Ph.D.  
Paul Burke, Ph.D.  
Carol D'Lugo, Ph.D.  
Debórah Dwork, Ph.D.  
Jody Emel, Ph.D.  
William Ferguson, Ph.D.  
Odile Ferly, Ph.D.  
Everett Fox, Ph.D.  
Susan Hanson, Ph.D.  
Betsy P. Huang, Ph.D.  
Fern Johnson, Ph.D.  
Willem Klooster, Ph.D.  
Sharon Krefetz, Ph.D.  
Thomas Kuehne, Ph.D.  
Constance Montross, Ph.D.  
Paul W. Posner, Ph.D.  
Robert Ross, Ph.D.  
Valerie Sperling, Ph.D.  
Jaan Valsiner, Ph.D.

### Principal Advisers

Janette Greenwood, Ph.D.  
Shelly Tenenbaum, Ph.D.

### Program Overview

Race and Ethnic Relations is an interdisciplinary concentration that enables students to examine relations within and between racial and ethnic groups primarily in the United States. The concentration brings together a wide range of courses in the humanities and social sciences that allow students to compare experiences across racial and ethnic groups. The concentration also allows students to compare the U.S. experience with that of other racially and ethnically diverse countries in Europe, the Middle East, Africa and Asia, past and present.

### Undergraduate Requirements

Students fulfilling the race and ethnic relations concentration are required to take a minimum of six courses. Five of the six courses must be U.S.-based courses; one must focus on a country or region outside the United States.

1. One course must be HIST016 Race and Ethnicity in American History, a humanities course. This course serves as the introductory course for the concentration.
2. Two additional courses in the humanities (classics, English, foreign languages and literature, history). One of these courses must be a literature course.
3. Three courses in the social sciences (cultural and global processes, geography, government, sociology).
4. A minimum of three courses must be at the 200 level. One course must be an advanced seminar approved by the student's adviser. The advanced seminar serves as the capstone experience.
5. One course whose focus is a country or region other than the United States.

### Introductory Course

HIST016 Race and Ethnicity in American History

### Humanities Courses

Choose at least two:

CMLT125 Crossing Boundaries  
ENG114 American Talk  
ENG182 African-American Literature I  
ENG183 African-American Literature II  
ENG215 Language and Culture in the United States  
ENG257 Language at Issue  
ENG276 Ethnic America: Literary and Theoretical Perspectives/Seminar  
ENG279 Fictions of Asian-American Literature  
ENG291 Literature of the Harlem Renaissance  
HIST021 Voices from Slavery  
HIST113 Urban Landscapes: The City in American History from Colonial to Modern Times  
HIST206 Africans in the Americas  
HIST214 The American Civil War  
HIST217 Reconstruction: America After the Civil War, 1865-1877/Seminar  
HIST222 History of the South  
HIST223 The Civil Rights Movement  
HIST235 The Atlantic World MUSC151 Jazz History  
SPAN117 Field Work in the Hispanic Community

### Social Science Courses

Choose at least three:

GEOG090 Americans and Natural Resources  
GOVT171 Urban Politics: People, Power and Conflict in U.S. Cities  
GOVT221 Urban Policy Internship Seminar  
PSYC156 Cultural Psychology  
PSYC157 Cultural Psychology of Urban Living  
SOC200 Class, Status and Power  
SOC203 American Jewish Life  
SOC252 Race and American Society

### Courses on Race and Ethnicity Outside the United States

Choose at least one:

ARTH232 Converging Cultures in the Age of Discovery/Seminar  
CLAS262 Jews and Christians in the Ancient World  
CMLT130 The National Imagination  
CMLT172 Islands in the Stream  
CMLT208 Her Story: History & Fiction of Caribbean Women Writers  
ENG254 Still Spaces - East Meets West  
GOVT173 Introduction to Latin American Politics  
GOVT178 South Africa: History and Contemporary Politics  
GOVT210 Violence: The Case of the Middle East  
GOVT228 Comparative Politics of Race, Ethnicity and Gender  
GOVT230 Armenian Genocide  
GOVT290 Inter-American Relations/Seminar  
HIST173 History of Racial Thought in Modern Europe  
HIST175 The History of the Holocaust to 1933  
HIST234 Racial Thought & Body Politics in Modern Europe (1500-2000)  
HIST242 History of Nationalism  
HIST268 The Holocaust: Issues and Controversies/Seminar



HIST273 Life Under Occupation HIST284 The Holocaust  
and its Aftermath

ID120 Introduction to Social Anthropology

SOC260 Roots and Routes: Immigrants, Diasporas and Travel

SPAN239 Hispanic-Caribbean Fiction

SPAN245 Hispanic-American Short Story

#### **Independent Study Courses**

RER299 Sec. 1 Directed Readings

RER299 Sec. 5 Special Projects

RER299 Sec. 9 Internship

#### **Courses**

**ARTH232 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR**

See Art History 232.

**CLAS262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD**

See Classics 262.

**CMLT125 CROSSING BOUNDARIES/LECTURE, DISCUSSION**

See Comparative Literature 125.

**CMLT130 THE NATIONAL IMAGINATION**

See Comparative Literature 130.

**CMLT174 ISLANDS IN THE STREAM: PUERTO RICO AND THE FRENCH ANTILLES**

See Comparative Literature 174.

**ENG114 AMERICAN TALK/FIRST-YEAR SEMINAR**

See English 114.

**ENG237 ASIANS AND JEWS IN THE UNITED STATES/LECTURE, DISCUSSION**

See English 237.

**ENG263 BRITISH ROMANTIC LITERATURE: RACE AND IMPERIALISM IN  
ROMANTICISM/SEMINAR**

See English 263.

**GEOG020 AMERICAN CITIES: CHANGING SPACES, COMMUNITY PLACES/  
LECTURE, DISCUSSION**

See Geography 020.

**GEOG197 NATIVE AMERICANS AND NATURAL RESOURCES**

See Geography 197.

**GOVT171 URBAN POLITICS: PEOPLE, POWER AND CONFLICT IN U.S.  
CITIES/LECTURE, DISCUSSION**

See Government and International Relations 171.

**GOVT214 MASS MURDER AND GENOCIDE UNDER COMMUNISM/LECTURE,  
DISCUSSION**

See Government and International Relations 214.

**GOVT230 THE ARMENIAN GENOCIDE/LECTURE, DISCUSSION**

See Government and International Relations 230.

**GOVT282 HOUSING POLICIES AND POLITICS/SEMINAR**

See Government and International Relations 282.

**HIST016 RACE AND ETHNICITY IN AMERICAN HISTORY/LECTURE, DISCUSSION**

See History 016.

**HIST021 VOICES FROM SLAVERY/FIRST-YEAR SEMINAR**

See History 021.

**HIST113 AMERICAN URBAN HISTORY/LECTURE, DISCUSSION**

See History 113.

**HIST152 JEWS IN EARLY MODERN EUROPE AND COLONIAL AMERICA/  
LECTURE, DISCUSSION**

See History 152.

**HIST153 EUROPE IN THE AGE OF EXTREMES: THE 20TH CENTURY**

See History 153.

**HIST173 THE HISTORY OF RACIAL THOUGHT IN MODERN EUROPE/LECTURE,  
DISCUSSION**

Surveys European racial thought from the 15th to the 20th century. Places racial thinking over the last five centuries in the context of social, economic, cultural and political trends. Attention is also paid to the history of minority groups in Europe and European encounters with non-European peoples in the wider world. Some effort is made to compare European racial thought to what happened in other countries, such as the United States and Japan. Fulfills the historical perspective requirement. Mr. Gellately/Offered every year

**HIST175 HOLOCAUST: AGENCY AND ACTION LECTURE, DISCUSSION**

See History 175.

**HIST206 AFRICANS IN THE AMERICAS, 1500-1888/LECTURE, DISCUSSION**

See History 206.

**HIST214 THE AMERICAN CIVIL WAR/LECTURE, DISCUSSION**

See History 214.

**HIST216 EARLY AMERICA /PROSEMINAR**

See History 216.

**HIST217 RECONSTRUCTION: AMERICA AFTER THE CIVIL WAR, 1865-1877/  
SEMINAR**

See History 217.

**HIST221 AFRICAN-AMERICAN HISTORY TO 1865/LECTURE, DISCUSSION**

See History 221.

**HIST222 HISTORY OF THE SOUTH/LECTURE, DISCUSSION**

See History 222.

**HIST223 THE CIVIL RIGHTS MOVEMENT/LECTURE, DISCUSSION**

See History 223.

**HIST227 THE CARIBBEAN IN THE ERA OF SLAVERY, 1492-1886/LECTURE,  
DISCUSSION**

See History 227.

**HIST234 RACIAL THOUGHT AND BODY POLITICS IN MODERN EUROPE  
(1500-2000)/SEMINAR**

See History 234.

**HIST235 THE ATLANTIC WORLD/LECTURE, DISCUSSION**

See History 235.

**HIST242 HISTORY OF NATIONALISM/LECTURE, DISCUSSION**

See History 242.

**HIST268 SPECIAL TOPICS: MASS MURDER AND MEMORY/SEMINAR**

See History 268.

**HIST273 LIFE UNDER OCCUPATION/SEMINAR**

See History 273.

**HIST285 INTRODUCTION TO AFRICAN-AMERICAN HISTORY, 1865-PRESENT/  
LECTURE,DISCUSSION**

See History 285.

**ID120 INTRODUCTION TO CULTURAL ANTHROPOLOGY/LECTURE, DISCUSSION**

See International Development and Social Change 120.

**MUSC151 JAZZ HISTORY/LECTURE, TUTORIAL**

See Music 151.

**PSYC156 CULTURAL PSYCHOLOGY/LECTURE, DISCUSSION**

See Psychology 156.

**PSYC157 CULTURAL PSYCHOLOGY OF URBAN LIVING/ LECTURE, DISCUSSION**  
See Psychology 157.

**RER020 AMERICAN CITIES: CHANGING SPACES, COMMUNITY PLACES/ LECTURE, DISCUSSION**  
See Geography 020.

**RER021 VOICES FROM SLAVERY/FIRST-YEAR SEMINAR**  
See History 021.

**RER090 NATIVE AMERICANS AND NATURAL RESOURCES**  
See Geography 197.

**RER103 AFRICA AND THE WORLD/LECTURE, DISCUSSION**  
See Government and International Relations 103.

**RER117 FIELD WORK IN THE LATINO COMMUNITY**  
See Spanish 117.

**RER126 CITIES AND SUBURBS/VARIABLE FORMAT**  
See Sociology 125.

**RER178 SOUTH AFRICA: HISTORY AND CONTEMPORARY POLITICS/LECTURE, DISCUSSION**  
See Government and International Relations 178.

**RER182 AFRICAN AMERICAN LITERATURE I/LECTURE, DISCUSSION**  
See English 182.

**RER183 AFRICAN AMERICAN LITERATURE II/LECTURE, DISCUSSION**  
See English 183.

**RER200 CLASS, STATUS AND POWER/VARIABLE FORMAT**  
See Sociology 200.

**RER203 AMERICAN JEWISH LIFE/VARIABLE FORMAT**  
See Sociology 203.

**RER208 HER STORY: HISTORY AND FICTION OF CARIBBEAN WOMEN WRITERS**  
See Comparative Literature 208.

**RER211 POLITICS AND DEVELOPMENT IN SOUTHERN AFRICA/SEMINAR**  
See Government and International Relations 219.

**RER214 MASS MURDER AND GENOCIDE UNDER COMMUNISM/LECTURE, DISCUSSION**  
See Government and International Relations 214.

**RER215 LANGUAGE AND CULTURE IN THE UNITED STATES/LECTURE, DISCUSSION**  
See English 215.

**RER216 EARLY AMERICA /PROSEMINAR**  
See History 216.

**RER223 THE CIVIL RIGHTS MOVEMENT/LECTURE, DISCUSSION**  
See History 223.

**RER227 THE CARIBBEAN IN THE ERA OF SLAVERY, 1492-1886/LECTURE, DISCUSSION**  
See History 227.

**RER234 RACIAL THOUGHT AND BODY POLITICS IN MODERN EUROPE (1500-2000)/SEMINAR**  
See History 234.

**RER235 THE ATLANTIC WORLD/LECTURE, DISCUSSION**  
See History 235.

**RER252 RACE AND AMERICAN SOCIETY/LECTURE, DISCUSSION**  
See Sociology 252.

**RER257 LANGUAGE AT ISSUE/SEMINAR**  
See English 257.

**RER263 BRITISH ROMANTIC LITERATURE: RACE AND IMPERIALISM IN ROMANTICISM/SEMINAR**  
See English 263.

**RER265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE/ VARIABLE FORMAT**  
See Sociology 265.

**RER270 THE AFRICAN AMERICAN SATIRICAL NOVEL/SEMINAR**  
See English 270.

**RER276 ETHNIC AMERICA: LITERARY AND THEORETICAL PERSPECTIVES/SEMINAR**  
See English 276.

**RER277 RACE AND GENDER IN AFRICAN AMERICAN LITERARY THEORY/ DISCUSSION**  
See English 277.

**RER285 INTRODUCTION TO AFRICAN-AMERICAN HISTORY, 1865-PRESENT/ LECTURE,DISCUSSION**  
See History 285.

**RER291 LITERATURE OF THE HARLEM RENAISSANCE/SEMINAR**  
See English 291.

**SOC203 AMERICAN JEWISH LIFE/VARIABLE FORMAT**  
See Sociology 203.

**SOC260 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL/ LECTURE, DISCUSSION**  
See Sociology 260.

**SOC285 SOCIAL POLICY, IMMIGRATION AND POVERTY/SEMINAR**  
See Sociology 285.

**SPAN239 HISPANIC CARIBBEAN FICTION/ LECTURE, DISCUSSION**  
See Spanish 239.

**SPAN245 HISPANIC-AMERICAN SHORT STORY/LECTURE, DISCUSSION**  
See Spanish 245.

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## URBAN DEVELOPMENT AND SOCIAL CHANGE

### Program Faculty

John Brown, Ph.D.  
Miriam Chion, Ph.D.  
Thomas Del Prete, Ed.D.  
Timothy Downs, D.Env.  
Jacqueline Geoghegan, Ph.D.  
Janette T. Greenwood, Ph.D.  
Sharon Krefetz, Ph.D.  
Bruce London, Ph.D.  
Sarah Michaels, Ph.D.  
Amy Richter, Ph.D.  
Heather L. Roberts, Ph.D.  
Dianne Rocheleau, Ph.D.  
Robert Ross, Ph.D.  
Laurie Ross, Ph.D.  
Mark Tigan, Ph.D.

### Principal Advisers

Sharon P. Krefetz, Ph.D., *Program Director*  
Deborah Martin, Ph.D.  
Amy Richter, Ph.D.  
Laurie Ross, Ph.D.  
Robert J.S. Ross, Ph.D.



## Program Overview

Urbanization has been one of the most powerful processes defining American life since the start of the 20th century. More than three-quarters of the U.S. population is currently classified as urban, suggesting that in many ways understanding contemporary America requires understanding cities—the broad patterns and notable variations in their growth, decline, and in some cases, revitalization. The urban development and social change concentration provides students majoring in any field with a structured program of study that enables them to understand the historical, social, economic and political factors that have shaped U.S. cities and how cities have, in turn, affected the lives of their inhabitants.

The study of urban development and social change is made all the more significant since more than half of the world's population will soon be living in cities, and urbanization will undoubtedly be one of the key forces shaping life in the 21st century.

Students in the urban development and social change concentration study the key concepts and methodological tools used to explore and analyze urban phenomena, focusing primarily on cities in the United States. Students may also choose to take a course that examines urbanization in other parts of the world. Proceeding from an introductory course through intermediate and advanced courses offered in several departments, students then apply these concepts and methods in their capstone experience. The capstone can be either a research project or an internship, conducted under the supervision of one of the concentration's participating faculty or done as part of an urban research or internship seminar.

For a capstone project, students in the concentration are encouraged to take advantage of the unparalleled opportunities for field research and applied learning that are offered by Clark's location in the center of Worcester. Like many medium-sized cities in the Northeast and Midwest, Worcester has experienced significant social, economic and political changes over the past several decades, which make it a superb laboratory for learning. Moreover, Clark's involvement in the University Park Partnership (UPP)—a partnership the University forged with neighborhood groups, businesses, and city and state government agencies—provides unique opportunities for students to contribute to innovative efforts to improve education, housing, and economic and social conditions in our inner-city neighborhood.

Students who pursue the UDSC concentration acquire a solid foundation for Clark's Community Development and Planning Master's Program.

## Requirements

1. Students must take a minimum of seven courses in the concentration, including the capstone project.
2. The seven courses must come from three or more different departments.
3. One of these courses, which should be taken at the outset, must be an introductory course selected from Group A.
4. One of these courses must be a research methods course, which should be taken as early as possible, selected from Group B.
5. At least three additional courses focusing on U.S. cities must be taken from Group C. At least two of these courses must be at the 200 level.

6. One of the seven courses may be selected from Group D and have a non-U.S., international or comparative focus.
7. One of the seven courses must include a culminating capstone experience, consisting of a research or internship project, done either as part of an urban research or internship seminar or as a directed project supervised by a UDSC principal faculty member or a faculty member who participates in the UDSC Program..
8. No more than two courses in the concentration can also be used to satisfy the requirements of a major, minor or other concentration (excluding courses required for the major).

Students pursuing the concentration receive advice from one of the principal faculty members to select appropriate courses for the concentration.

## Courses

### Group A: Introductory Courses

GEOG020 American Cities: Changing Spaces/Community Places  
GOVT171 Urban Politics: People, Power and Conflict in U.S. Cities  
HIST113 Urban Landscapes: The City in American History from Colonial to Modern Times  
SOC125 Cities and Suburbs

### Group B: Research Methods Courses

ECON160 Introduction to Statistical Analysis  
GEOG141 Research Methods in Geography  
GOVT107 Research Methods in Politics  
SOC105 Social Research Process

### Group C: U.S. Urban Courses

(\*) indicates that the course may be used to fulfill the capstone requirement

ECON277 Urban Economics  
EDUC112 Transformative Schooling: Documentary Video for Social Change  
EDUC152 Complexities of Urban Schooling  
GEOG244 Gender, Work and Space  
GEOG254 Urban Transportation: Problems and Prospects  
GEOG258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century  
GEOG262 Urban Economic Geography  
GEOG280 Urban Ecology: Cities as Ecosystems  
GOVT172 Suburbia: People and Politics  
GOVT221 Urban Policy/Seminar and Internship\*  
GOVT282 Housing Policies and Politics\*  
HIST203 U.S. Urban History: Colonial—Modern Period\*  
HIST213 Gender and the City in the United States\*  
ID296 GIS and Local Planning  
IDCE30211 Field Research in Youth Development and High-School Transformation\*  
IDCE332 Environmental and Social Impacts Assessment\*  
IDCE346 Practicum in Community Development and Planning\*  
PSYC211 Laboratory in Community Psychology\*  
SOC244 The Community  
SOC285 Poverty Seminar  
SOC299 Sec.9 Internships in Sociology\* (depending on specific focus)  
SPAN117 Field Work in the Latino Community

#### **Group D: Comparative or International Courses**

- ARTH114 Ancient Cities and Sanctuaries
- ARTH216 Architecture and Democracy
- CMLT288 Art of the City: Paris and New York
- SOC290 Cities in Global Perspective\*
- SOC232 Population, Environment and Development

#### **Courses**

##### **ARTH216 ARCHITECTURE AND DEMOCRACY/SEMINAR**

See Art History 216.

##### **CMLT288 ART OF THE CITY: PARIS AND NEW YORK/ DISCUSSION**

See Comparative Literature 288.

##### **ECON160 INTRODUCTION TO STATISTICAL ANALYSIS/LECTURE, DISCUSSION**

See Economics 160.

##### **ECON277 URBAN ECONOMICS/LECTURE, DISCUSSION**

See Economics 277.

##### **EDUC112 TRANSFORMATIVE SCHOOLING: DOCUMENTARY VIDEO FOR SOCIAL CHANGE/FIRST-YEAR SEMINAR**

See Education 112.

##### **EDUC152 COMPLEXITIES OF URBAN SCHOOLING/ LECTURE, DISCUSSION**

See Education 152.

##### **ENG281 AMERICAN LITERARY RENAISSANCE/SEMINAR**

See English 281.

##### **GOVT222 GOVERNING CITIES IN SUBURBAN AMERICA**

See Government and International Relations 222.

##### **HIST113 AMERICAN URBAN HISTORY/LECTURE, DISCUSSION**

See History 113.

##### **HIST203 U.S. URBAN HISTORY: COLONIAL-MODERN PERIOD/SEMINAR**

See History 203.

##### **HIST213 GENDER AND THE CITY IN THE UNITED STATES/SEMINAR**

See History 213.

##### **HIST218 WORK AND PLAY IN THE CITY: THEN AND NOW**

See History 218.

##### **ID203 PROGRAM EVALUATION FOR YOUTH AND COMMUNITY DEVELOPMENT INITIATIVES**

See International Development and Social Change 237.

##### **ID204 INTERNATIONAL AND COMPARATIVE ANALYSIS OF COMMUNITY DEVELOPMENT**

See International Development and Social Change 204.

##### **ID296 VECTOR GIS / LECTURE, LABORATORY**

See International Development and Social Change 296.

##### **IDCE30202 LAND USE SEMINAR**

See Community Planning and Development 30202.

##### **IDCE30293 YOUTH AND COMMUNITY DEVELOPMENT: THEORY, POLICY AND PRACTICE/SEMINAR**

See Community Planning and Development 30293.

##### **IDCE332 SUSTAINABLE DEVELOPMENT ASSESSMENT AND PLANNING**

See Community Planning and Development 332.

##### **IDCE344 GOING LOCAL: COMMUNITY DEVELOPMENT AND PLANNING**

See Community Planning and Development 344.

##### **IDCE346 PRACTICUM IN COMMUNITY DEVELOPMENT AND PLANNING**

See Community Planning and Development 346.

##### **PSYC211 LABORATORY IN COMMUNITY PSYCHOLOGY/LABORATORY, DISCUSSION**

See Psychology 211.

##### **SOC290 CITIES IN GLOBAL PERSPECTIVE/SEMINAR**

See Sociology 290.

##### **UDSC011 MAKING A DIFFERENCE/FIRST-YEAR SEMINAR**

See International Development and Social Change 011.

##### **UDSC020 AMERICAN CITIES: CHANGING SPACES, COMMUNITY PLACES/ LECTURE, DISCUSSION**

See Geography 020.

##### **UDSC105 SOCIAL RESEARCH PROCESS/LECTURE, DISCUSSION**

See Sociology 105.

##### **UDSC107 RESEARCH METHODS/LECTURE, DISCUSSION**

See Government and International Relations 107.

##### **UDSC117 FIELD WORK IN THE LATINO COMMUNITY**

See Spanish 117.

##### **UDSC125 CITIES AND SUBURBS/VARIABLE FORMAT**

See Sociology 125.

##### **UDSC141 RESEARCH DESIGN AND METHODS IN GEOGRAPHY/LECTURE, DISCUSSION**

See Geography 141.

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##### **UDSC243 THE COMMUNITY/LECTURE, DISCUSSION**

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##### **UDSC257 UTOPIAN VISIONS, URBAN REALITIES: PLANNING CITIES FOR THE 21ST CENTURY/ LECTURE, DISCUSSION**

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##### **UDSC296 VECTOR GIS / LECTURE, LABORATORY**

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# Academic Calendar

## 2008-2009



### FALL 2008

Sept. 1	Labor Day - no classes
Sept. 2	First day of classes
Sept. 26-28	Family Weekend
Oct. 13	Columbus Day - no classes
Nov. 7	Last day for undergraduate students to withdraw with a grade of W
Nov. 26-28	Thanksgiving Recess
Dec. 9	Monday Schedule
Dec. 12	Last day for graduate students to withdraw with a grade of W
Dec. 12	Last day of classes
Dec. 13-15	Reading Days
Dec. 16-19	Final Exams
Dec. 20	Exam make-up day

### SPRING 2009

Jan. 12	First day of classes
Jan. 19	Martin Luther King Day - no classes
March 2-6	Mid-term break
March 27	Last day for undergraduate students to withdraw with a grade of W
April 27	Last day of classes
Apr 28-29	Reading Days
Apr 30	Final Exams
May 1, 4, 5	Final Exams
May 17	Commencement

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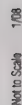
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